# Journal of Youth Development

## Bridging Research & Practice

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## Editor's Comments:

Our Spring Issue brings readers an overview of several innovative youth development programs and evaluation techniques. Highlights include results from a multi-state camping research consortium project, a study of how public librarians engage youth in library programs and a review of an animal-assisted character education program for improving student behavior.

Manuscripts for the Summer 2011 thru Spring 2012 Issues are now being accepted. The Publication Committee has increased the word count for manuscripts as noted below:

- **Feature Articles** ~ informational, explanatory, or critical analysis and interpretation of major trends or comprehensive reviews. Include clear implications for youth development practice and programming. 2,000-5,000 words
- **Program Articles** ~ discuss programs and outcomes or describe promising programs and pilot projects that have clear implications for youth development research, practice and programming. 1,500-4,000 words
- **Research and Evaluation Strategies** ~ describe innovative methodologies and strategies in the collection and analysis of quantitative or qualitative research and evaluation data. 1,500-4,500 words
- **Resource Reviews** ~ present analyses of materials, such as books, curricula or videos. 300-800 words

## Publication Committee

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# Contents

## Feature Articles

## Combating Youth Violence Through Anti-Violence Coalitions in Three West Virginia Counties [Article 110601FA004]

*Sturgill, Ronda; Barnett, Bob; Barnett, Lysbeth*

Kids Win was funded by SAMHSA (Substance Abuse and Mental Health Services Administration) for Cabell, Mason and Wayne Counties in West Virginia. The goal of the project was to develop anti-violence coalitions in the three counties and to develop a strategic plan for a pilot program combating youth violence. The pilot program was designed to use the Second Step and Hazelden Anti-Bullying curricula at the three middle schools. Evaluation methods included a survey of teachers, a survey of students, and a comparison of results of a state mandated school discipline report. All three data sources support the conclusion that violence was reduced significantly because of the Kids Win Program. Kids Win has demonstrated what can be accomplished by teaching students the behavioral skills needed to resolve problems without escalating violence. This program merits replication and expansion and can serve as a model for other programs.

## The Influence of Past Experiences on the Motivation of Adult Volunteers [Article 110601FA005]

*Eason, Marcus; Morgan A. Christian; Duncan, Dennis W.*

From its' conception, 4-H has encouraged volunteerism and utilized volunteers to accomplish its' mission - to assist youth in acquiring knowledge, developing life skills, and forming attitudes that will enable them to become self-directing, productive and contributing members of society. The purpose of this study was to explore and describe the factors that motivated [state] 4-H camp volunteers to volunteer with 4-H youth. The Volunteer Functions Inventory was used as the theoretical base for this study. The Values construct (M=3.68) of the VFI was the highest motivating factor of adult 4-H volunteers. The Understanding construct (M=3.39) ranked the second highest motivational factor in volunteerism followed by Social construct (M=3.28), the Enhancement construct (M = 3.05) and the Protective construct (M=2.78). The Career construct (M=2.61) was the least motivating factor to adult volunteers. It was also found that participants that were not involved with 4-H as a youth volunteered more days per year than did participants who were former 4-H members.

## Perceptions of Empowerment of Participants within Youth Development Programs [Article 110601FA006]

*Busing, Kyle*

Highlighted in this paper is a study designed to investigate perceptions of empowerment among young 4-H club members. Participants included 90 boys and girls (mean age 10.61). Perceptions of the autonomy supportive nature of 4-H leaders and the general climate of 4-H clubs were assessed. MANCOVA analyses revealed participants perceived 4-H leaders and the general climate to be empowering. Although the young participants in this study confirmed some of the positive views found elsewhere in the literature, considerable disparities in their responses to various surveys were noted. There appeared to be uncertainty or misunderstanding among youngsters when asked to respond to questions about these concepts. The need for more useful quantitative measures of programmatic impact was accentuated.

# Program Articles

## The Healing Species: Animal-Assisted Character Education for Improving Student Behavior [Article 110601PA001]

*Pearson, Wanda J.*

The Healing Species program aims to reduce disruptive behaviors at school by increasing students' abilities to avoid conflict when possible and to resolve conflicts peaceably when they occur. The program's 11 lessons incorporate elements of behavior theory that postulate behavior follows belief. This study hypothesized that 5th and 6th grade students who

completed the Healing Species curriculum would show fewer normative beliefs favoring aggression, greater empathy, and fewer disciplinary infractions, than a comparable group of students who did not receive the Healing Species program. Lessons included the participation of rescued dogs to emphasize compassion, empathy, responsibility, and forgiveness. Study results offered evidence of improved overall behavior and specific reductions in violence and aggression.

## Research and Evaluation Strategies

### Integrative Literature Review of Adolescent Risk and Health Compromising Behaviors Guided by the Problem Behavior Theory [Article 110601RS001]

*March, Alice L.*

Twenty percent of the world's population is adolescents. Although generally healthy, risky behaviors result in premature death from injury and establish lifestyle choices which may give rise to poor health and disability during adult life. This integrative review presents the state of the literature related to adolescent health risk behaviors as framed by the problem behavior theory. The key word search using the databases of ERIC, CINAHL Plus with full text, PsycARTICLES, and PsycINFO yielded an internationally representative group of articles consistent with the guiding framework. Fifteen articles related to risk factors, protective factors, risk behaviors, and health-compromising behaviors of adolescents were retained from the past five years. Although the literature is replete with research involving adolescents, gaps are identified, and recommendations for future research are considered.

### Developing a Life Skills Evaluation Tool for Assessing Children Ages 9-12 [Article 110601RS002]

*Luckey, Kristina L.; Nadelson, Louis S.*

Efforts that attend to the developmental needs of children, enhance their capacity to learn, and support their potential for becoming successful, have tremendous merit. Therefore, it is critical that steps are taken to evaluate the effectiveness of such endeavors. The purpose of this study was to create and validate a life skill outcomes instrument for use in extension youth programs. This instrument validation study utilized both quantitative and qualitative methodologies to establish the validity and reliability of a life skills instrument for nine to twelve year olds. The data collected from 111 participants suggests that the instrument is both valid and reliable for the intended age group. Study results, limitations, and ideas for future research are discussed.

## Resource Review

### *Design It! Design Engineering in After School Programs* (2002), and *Explore It! Science Investigations in Out-of-School Programs* (2006) [Article 110601RR001]

*Myers, Phillipa*

Science programming can be daunting for after school educators and para-educators. These two resources insure science is fun for both youth and educators! *Design It! Design Engineering in After School Programs* (2002), and *Explore It! Science Investigations in Out-of-School Programs* (2006) encourage the love of science learning through an exploratory format that is grounded in cooperative learning. Each of the two programs contain multiple projects using readily available and affordable materials. *Design It!* includes project topics such as Gliders, Spinning Toys, and Trebuchets. *Explore It!* includes project topics such as Wiring a House, Soda Science, and Balancing Toys.

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# Examining Youth Camping Outcomes Across Multiple States: the National 4-H Camping Research Consortium (NCRC)

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**Volume 6, Number 1, Spring 2011** **Article 110601FA001**

# Examining Youth Camping Outcomes Across Multiple States: the National 4-H Camping Research Consortium (NCRC)

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**Abstract:** The impact of residential camp participation is needed for camps focused on a variety of outcomes including education, summer fun, prevention, and youth development. One system, the Cooperative Extension Service, conducts 4-H residential camps in most states nationwide every year. These camps, though offering educational enhancement and fun activities, are focused on youth development, incorporating a framework called the essential elements of positive youth development. The National 4-H Camping Research Consortium (NCRC), a group of Extension specialists and county-level educators, designed and piloted assessment tools for 4-H camps that can be used at any camp that focuses on youth development. The camp context questionnaire measures three essential elements of youth development: relationship with a caring adult, self-determination and mastery, and safe and inclusive environments. The life skill questionnaire measures three life skills: accepting self and others, accomplishing goals, and taking responsibility. Logic models and evaluation guidelines help camp directors plan camps that work for youth.

## Background

Measuring the developmental outcomes of camp experiences for youth has been a major focus of many organizations. The American Camp Association (ACA) published the results of a national study of youth outcomes entitled, "Youth Development Outcomes of the Camp Experience" (ACA, 2005) in partnership with ACA-accredited camps including not-for-profit organizations, religious denominations, youth-serving agencies, municipalities, and independent camp owners. Although ACA's study generated excellent information about the impacts of youth camping in general, additional information has been needed about the youth outcomes of specific types of camps such as those focused on educational experiences (e.g. religious, sports, science and technology, and environment), those focused on preventative or therapeutic activities, and those targeting youth development.

One organization that focuses primarily on youth development is the 4-H program. It is one of the largest national agency providers of youth camping, involving 448,918 youths in 2008 (USDA, 2008). The 4-H program is a part of the national Cooperative Extension system, housed at land-grant universities, and is funded largely by the United States Department of Agriculture (USDA). Residential 4-H camps incorporate a framework called the "essential elements of youth development" into all camp activities. These elements include positive relationships with caring adults, emotionally and physically safe environments, opportunities for self-determination and mastery, a sense of belonging in an inclusive environment, and opportunities to value and practice service to others (American Camp Association, 2006; Kress, 2005; National 4-H Collaboration for Youth Members, 1999).

The 4-H camping program is not alone in its approach to youth development; other groups use similar frameworks (American Camp Association, 2006; America's Promise, 2000; Gambone & Arbreton, 1997). Most 4-H camps also emphasize life skill development and use a model developed by the Iowa State University. These life skills are divided into eight categories: caring, giving, working, being, living, thinking, managing, and relating (Hendricks, 1998). Although 4-H camps include the usual camping educational activities, the emphasis is heavily on positive youth development.

Although many land-grant universities evaluate 4-H camping each summer—and a strong body of literature has evolved over the past decade reflecting these evaluations (Arnold, Bourdeau, &

Nagele, 2005; Bird, Coutellier, Borba, Dixon, & Horowitz, 2010; Ferrari, & McNeely, 2007; Forsythe, Matysik, & Nelson, 2004; Garst & Bruce, 2003; Garton, Miltenberger, & Pruett, 2007), systematic evaluation across multiple states has been rare. To respond to this need, in 2002, a group of 4-H camping specialists, researchers, and evaluators created the National 4-H Camping Research Consortium (NCRC) to coordinate the resources of multiple state 4-H programs in order to more effectively evaluate the outcomes of 4-H camping on a national level. Because this task required a collaborative effort that would be beyond the capabilities of individual states, a consortium approach was warranted. The NCRC was established as a working group of the National Association of Extension 4-H Agents' (NAE4-HA) Camping and Environmental Education Taskforce, as approved at the annual conference in Norfolk, VA, in October 2002. Initially, the State 4-H Office in Virginia coordinated the working group.

The taskforce established goals to accomplish the following objectives:

1) To develop a consortium of camping and research/evaluation professionals who would work cooperatively to explore the outcomes of 4-H camping on a national level
2) To develop standardized instruments and procedures to assess the outcomes of 4-H camping on a national level
3) To complete multistate 4-H camp evaluations using standardized instruments and procedures
4) To disseminate evaluation results at national Extension conferences
5) To disseminate evaluation results in at least one nationally recognized and peer-reviewed journal
6) To develop a long-term plan for collaboration and continuance of the consortium.

Funding for the project came from three sources: 1) the Army/4-H Youth Camping Project, 2) Virginia Cooperative Extension (State 4-H Office at Virginia Tech), and the 3) Cooperative State Research, Education and Extension Service (CSREES), United States Department of Agriculture, now called the National Institute for Food and Agriculture (NIFA).

## Developing the Consortium

The National 4-H Camping Research Consortium (NCRC) had its first face-to-face meeting in 2005 in Washington, D. C. where planning began for the development of standardized measures and procedures. The seven universities participating in the NCRC, were University of Maryland, Montana State University, University of Nebraska-Lincoln, The Ohio State University, Rutgers University, Virginia Tech, and West Virginia University. Support for the NCRC was provided by the 4-H National Headquarters through the involvement of Dr. Suzanne LeMenestrel.

The NCRC also developed important guidelines for partners working on a national Extension-wide project. Those guidelines included:

1) establish professional expectations with regard to youth development, evaluation and research, and Extension/USDA work;
2) be sensitive to university expectations with regard to promotion and tenure, research compliance, finance, and time away from work;
3) distribute work fairly according to individual differences in abilities and interests;
4) allow individuals to "buy-in" and "buy-out";
5) establish dimensions of communication, including giving and accepting constructive criticism;
6) allow time for group formation and cohesion;

7) adhere to timelines and deadlines; and
8) recognize the contributions of all members.

## Developing Standardized Instruments and Procedures

The result of the work of the NCRC was the creation of the National 4-H Camp Evaluation Tool Kit, which includes three logic models (one each for overall camp context of camping - essential elements of youth development, and life skills developed at camp); recommended practices for 4-H camp evaluation; a 4-H camp context survey instrument and a 4-H camp life skills survey instrument.

The development of each of the evaluation tools was built on two assumptions. The first assumption was that certain characteristics or features are necessary in youth programs in order for a particular experiential context to provide positive youth development. Based upon the work of the National 4-H Impact Design Implementation Team (National 4-H Headquarters, 1999), these eight essential elements are defined as:

- a positive relationship with a caring adult
- emotionally and physically safe environment
- an inclusive environment
- engagement in learning
- opportunity for learning and mastery
- opportunity to see oneself as an active participant in the future
- opportunity for self-determination
- opportunity to value and practice service for others.

These eight elements have been further synthesized into four core areas, identified as belonging, independence, mastery, and generosity (Kress, 2005).

The second assumption of the NCRC's program evaluation approach was that the goal of any 4-H camping experience should be to provide opportunities to practice life skills in a real-life setting such as camp.

### Camp Logic Models

A logic model defines the intended outcomes to be experienced or achieved by program participants. It may be used for program planning, for program evaluation, or both. The three camping logic models developed by the NCRC provide a framework for describing the relationships among the investments made in camping programs, the activities or programs themselves, and the results or outcomes. They provide a common approach for integrating planning, implementation, evaluation, and reporting. These models are a guide for assessing camping programs. The NCRC logic models include:

1. The *4-H Camp Evaluation Logic Model* is an overview for the evaluation of camping programs. The framework focuses on the work done at 4-H camps and highlights the outcomes that result from successful 4-H camping. These outcomes confirm the validity of 4-H camping and are the foundation for building a consistent 4-H camping program model nationwide.
2. The *4-H Camp Context Logic Model* is a framework for understanding the camp environment based upon the eight essential elements of youth development

developed and used by the 4-H program nationwide. The essential elements are benchmarks for success in 4-H.

3. The *4-H Camp Life Skills Outcomes Logic Model* is a framework for measuring the life skill enhancement of campers. This logic model provides guidelines for inputs and outputs necessary to achieve life skill enhancement in youth.

These three logic models are not meant to be exhaustive, but rather are purposely general in nature so that the user may pick and choose the inputs, outputs, and outcomes that are relevant to his or her unique camping situation. Users may want to explore additional logic modeling resources for ways to expand or narrow the focus of the logic models in order to incorporate them into 4-H camp planning and evaluation efforts.

### The 4-H Camp Context Questionnaire

The "4-H Camp Context Questionnaire" was designed to measure whether a specific 4-H camp environment includes each of the eight essential elements throughout the course of the camp experience during a residential camp for youth ages 9-13. It uses a 4-point Likert scale with response categories 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. Although a camping program may choose to focus on one or more of the essential elements, it is highly recommended that the complete questionnaire be used. With this concept in mind, programs may choose to report only those elements selected for emphasis. Elements receiving less than favorable results may be targeted for future improvement. This instrument is meant to be descriptive. Camp directors will need to compare the results provided through this questionnaire with their camp mission, goals, and objectives. This comparison will assist in determining whether specific components of the camp program should be strengthened in order to increase the perceived presence of the elements.

### The 4-H Camp Life Skill Questionnaire

The "4-H Camp Life Skills Questionnaire" was designed to measure the acquisition of life skills during a residential 4-H camping program for youth ages 9-13. It uses a 4-point Likert scale with response categories 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. Although a camping program may choose to focus on one or more of the life skills, it is recommended that the complete questionnaire be used. As with the camp context questionnaire, this instrument is also meant to be descriptive. Camp directors will need to use the results provided by this questionnaire, in comparison with their camp mission, goals, and objectives. This comparison will help to determine whether specific components of the camp program might develop life skills more effectively.

### Recommended Practices for 4-H Camp Evaluation

The "recommended practices" for 4-H camp evaluation are meant to serve as a guide to Extension faculty, staff, and volunteers who engage in 4-H camp evaluation and research. In addition, these practices inform 4-H camp stakeholders about the practices that they should expect to be upheld by persons conducting 4-H camp evaluation and research. The recommended practices are meant to intentionally guide the decision-making processes involved in 4-H camp evaluation and research, and they draw heavily from the guiding principles and program standards of the American Evaluation Association (AEA, 2003).

## Field Testing the Toolkit

In the summers of 2006 and 2007, several states piloted the camp evaluation instruments. Although most universities do not require institutional review board approval for pilot studies, each university was asked to follow its own rules. The primary purpose of the pilot tests was to improve the instrument and tool kit materials. In 2006, the context questionnaire, a 73-item questionnaire, and the life skills questionnaire, a 69-item questionnaire, were administered to more than 2,000 male and female youths ages 9-13 at the end of a residential camp experience

across four states (Virginia, Ohio, Nebraska, and Kentucky). After that data were analyzed by statisticians at Virginia Tech, consortium members met to interpret the results as they pertained to the validity and reliability of the questionnaires. As a result, the questionnaires were shortened and refined and re-piloted in 2007. The new camp context questionnaire contained 33 items and the new life skills questionnaire contained 30 items. The life skill data was piloted in Virginia, West Virginia, and Kansas with 921 subjects, and the camp context data was piloted in Alaska, Montana, West Virginia, and Ohio with 1,016 subjects. Data were analyzed at the West Virginia University Extension Service.

## Analysis and Results

In the 2007 pilot, factor analyses were conducted with the life skill data. Three life skills were identified: accepting self and others, accomplishing goals, and taking responsibility. Reliability and validity analyses were also performed. The questionnaire was again adjusted to reflect the final analysis. The life skills questionnaire now contains 26 items. It uses a four-point response scale: strongly disagree, disagree, agree, strongly agree. Table 1 lists the life skills identified in the second pilot test with corresponding questions and Cronbach's alpha scores.

### Table 1

Life Skills at Camp – Questions and Cronbach's Alpha Scores

| | **Alpha** |
|---|---|
| **Accepting Self and Others** | .8480 |
| I was proud of my camp groups. | |
| I respected others who were different than me. | |
| I accepted people who thought or acted differently. | |
| I learned that some decisions are better than others. | |
| I learned that others' ideas were as important as mine. | |
| I made new friends. | |
| I respected other campers. | |
| I learned about my strengths and weaknesses. | |
| I treated others fairly. | |
| I was concerned about the well-being of others. | |
| I encouraged others to do their best. | |
| **Accomplishing Goals** | .8631 |
| I was proud of projects that I completed. | |
| I asked for help when I needed it. | |
| I chose to try new activities. | |
| I felt comfortable asking for help on a project. | |
| I always tried to do my best. | |
| I contributed to the success of the team. | |
| **Taking Responsibility** | .7754 |
| I was usually where I was supposed to be. | |
| I tried to do what was expected of me. | |
| I tried to solve problems without being violent. | |
| I was a good listener. | |
| I was responsible for my own behavior. | |
| I thought about a problem before trying to solve it. | |
| I thought carefully before making decisions. | |
| I tried to help if someone needed something. | |
| I cleaned up after myself. | |

Factor analyses were also conducted with the camp context data. Table 2 lists the results of the factor analyses and test for reliability in the second pilot test. Four elements of youth development were identified: opportunity to build a relationship with a caring adult, opportunity for self-determination and mastery, emotionally safe and inclusive environment, and physically safe environment. The camp context questionnaire now contains 30 items. Table 2 lists the life skills identified in the second pilot test with corresponding questions and Cronbach's alpha scores.

**Table 2**

Camp Context – Questions and Alpha Scores

| | **Alpha** |
|---|---|
| **Opportunity to Build a Positive Relationship with a Caring Adult** | .8463 |
| Leaders were people I could trust. | |
| Leaders thought that helping others is important. | |
| I could go to a leader if I had a problem. | |
| Leaders understood campers' problems. | |
| Leaders tried to make homesick campers feel better. | |
| Leaders liked being around campers. | |
| Leaders helped campers be successful. | |
| **Opportunity for Self-Determination and Mastery** | .8315 |
| My skills in some activities improved. | |
| My classes were interesting. | |
| I could make choices about how I spent my free time. | |
| I pushed myself to try harder because of challenging activities. | |
| I learned things that will be useful in the future. | |
| I felt like I had a choice in my camp classes. | |
| I felt good about something that I accomplished. | |
| I could make choices for recreation activities. | |
| Campers taught each other. | |
| Campers could be a part of making group decisions. | |
| Campers accomplished something they couldn't do the first day. | |
| Campers had the opportunity to learn about different careers. | |
| **Emotionally Safe and Inclusive Environment** | .7737 |
| Other kids did not like me. | |
| Other kids made fun of me. | |
| I was teased. | |
| Campers messed with others' belongings. | |
| Campers picked on one another. | |
| Mean jokes were played on campers. | |
| I felt free to express my opinion. | |
| I felt accepted by other campers. | |
| **Physically Safe Environment** | .8477 |
| I felt safe in my cottage/cabin. | |
| I felt safe at night. | |
| I felt safe in classes and activities. | |

## A Case Study: Use of the questionnaires at West Virginia 4-H Camps

Several states have adopted the use of the NCRC's logic models and youth questionnaires as a part of 4-H camp evaluation. In West Virginia, both the life skill and the camp context questionnaires have been implemented at county and state camps each year for the past three years. West Virginia 4-H camping data contains strong mean scores for each of the questions, and results of factor analyses show that the essential elements and life skills are consistent with the national data. However, further analysis of the camp context data for boys and girls has shown that boys do not score as high as girls on indicators of an emotionally safe and inclusive environment. Consistently, over three years, the analysis shows that boys indicate that they feel less emotionally safe at camp than girls. As a result of these findings, West Virginia University Extension 4-H educators and camp coordinators have made adjustments to the camp environment, including instituting mentoring and new-camper orientations, and have implemented stronger policies to prevent bullying. In the summer of 2010, focus groups will be held to discover the specific issues behind these findings.

## Disseminating the Toolkit and Results

Members of the NCRC have disseminated their work to 4-H educators and other camp professionals in a variety of ways. Presentations were made to the American Evaluation Association, and to the annual conferences of the National Association of Extension 4-H Agents and the American Camp Association (ACA), among others. The logic models and the questionnaires have been shared at National 4-H Camping Institutes, the California 4-H Camping Conference, Mountaineer Camping Institute, and multiple section and regional ACA conferences. A tool kit containing the logic models, questionnaires, and recommended practices is available upon request (National Camping Research Consortium, 2007).

## Future Plans and Projects

The NCRC will continue to develop other evaluation tools relevant to camp and 4-H youth development communities. Interests of consortium members include a questionnaire for teens to measure the impact of serving in a camp counselor role, questionnaires for camp staff, and qualitative methodologies such as focus group questions to better understand findings from the life skill and camp context instruments.

## Benefits and Limitations of a Collaborative Evaluation Process

Some of the lessons about building an evaluation consortium that members of the NCRC learned include:

- Reaching a consensus can take time. Therefore, collaborative planning for camp evaluation should begin well before the implementation of the camp. This supports the Extension programming model whereby purposeful planning for program outcomes occurs prior to the start of camp.
- When possible, other stakeholders, such as teen counselors, adult leaders and volunteers, summer camp staff members, parents, etc., should be allowed to provide input into the evaluation process. Again, this helps to generate buy-in. Support from these stakeholders is important, and recommended changes should be thoughtfully considered during the subsequent planning for camp evaluation.
- Survey design should allow each camp facility to add questions based upon individual needs. This flexibility encourages camp staff to care about the results and makes evaluation both relevant and responsive.
- Data should be collected from multiple sources (i.e., youths, leaders, and parents) to

strengthen results and to explore different aspects of camping outcomes (i.e., immediate, short-term, and long-term impacts).

- Resources may limit what data can be collected. Camp faculty and staff need to recognize these limitations and structure research designs that are practical with given resources.

## Conclusions

"High quality youth development doesn't just 'happen,' but rather it occurs through careful planning and the deliberate inclusion of certain elements" (Astroth, 1996).

The National Camping Research Consortium (NCRC) organized with the purpose of measuring whether those "certain elements" were present in the 4-H camping system. The evaluation tools they developed examine whether camps are providing the essential elements of youth development and are building life skills in youth. These instruments can be used in multistate or national settings, and aggregated data can give insights into the success and/or deficiencies of a camps or camp systems. The tools have been piloted and validated. The camp context questionnaire measures three essential elements of youth development: relationship with a caring adult, self-determination and mastery, and safe and inclusive environments. The life skill questionnaire measures three life skills: accepting self and others, accomplishing goals, and taking responsibility. Logic models and evaluation guidelines help camp directors plan camps that work for youth. A long-term plan for collaboration and continuance of the consortium is in place, including plans to develop tools to measure the impact of serving as a junior camp counselor or staff member.

Other agencies also use a youth development framework to design and implement their camping programs, even if their emphasis is on more specific educational or recreational goals. The evaluation tools contained in the National 4-H Camp Evaluation Tool Kit may be beneficial to many camps because there is growing consensus among youth development researchers, advocates and practitioners about the types of experiences that help develop a young person into a strong independent adult (Roth, 1998).

## References


America's Promise – The Alliance for Youth. (2000). *The five promises.* Retrieved on May 28, 2010, at www.americaspromise.org/FivePromises/FivePromises.cfm.

American Camp Association. (2005). *Directions: Youth Development Outcomes of the Camp Experience.* Retrieved April 20, 2010, from www.acacamps.org/research/enhance/directions.php.

American Camp Association. (2006). *Inspirations: Developmental Supports and Opportunities of Youths' Experiences at Camp.* Retrieved April 20, 2010 from www.acacamps.org/research/enhance/inspirations.php.

American Evaluation Associations. (2003). *Guiding Principles for Evaluators.* Retrieved May 20, 2010 at www.eval.org/Publications/GuidingPrinciples.asp.

Arnold, M., Bourdeau, V., & Nagele, J. (2005). Fun and friendship in the natural world: The impact of Oregon 4-H residential camping programs on girl and boy campers. *Journal of Extension* [Online], 46(6). Article No. 6RIB1. Available at: www.joe.org/joe/2006december/rb1.shtml.

Astroth, K. (1996). Eleven Essential Elements of Vibrant Youth Groups. *Humanics*, 6, 8-10.

Bird, M., Coutellier, C., Borba, J., Dixon, T., & Horowitz, M. (2010). *Counselor-in-Training: Encouraging Youth Development Outcomes at Camp*. Monterey, CA: Healthy Learning.

Ferrari, T.M., & McNeely, N.N. (2007). Positive youth development: What's camp counseling got to do with it? Findings from a study of Ohio 4-H camp counselors. *Journal of Extension* [On-line], 45(2), Article No. 2RIB7. Available at www.joe.org/joe/2007april/rb7.shtml.

Forsythe, K., Matysik, R., & Nelson, K. (2004). *Impact of the 4-H Camp Counseling Experience*. Madison: University of Wisconsin-Extension, Department of Youth Development.

Gambone, M.A., & Arbreton, A.J.A. (1997). Safe Havens: The contributions of youth organizations to healthy adolescent development. Public/Private Ventures.

Garst, B.A., & Bruce, F.A. (2003). Identifying 4-H camping outcomes using a standardized evaluation process across multiple 4-H educational centers. *Journal of Extension* [On-line], 41(3). Available at: www.joe.org/joe/2003june/rb2.shtml.

Garton, M.S., Miltenberger, M., & Pruett, B. (2007). Does 4-H camp influence life skill and leadership development? Journal of Extension [On-line], 45(4). Available at: www.joe.org/joe/2007august/a4.shtml.

Hendricks, P. (1998). Targeting life skills model. Available at: www.extension.iastate.edu/4H/lifeskills/homepage.html.

Kress, C. (2005). *Essential elements of 4-H youth development.* National 4-H Headquarters, CSREES USDA. Retrieved May 20, 2010 at hwww.national4- hheadquarters.gov/library/4h_presents.htm.

National 4-H Camping Research Consortium. (2007). *Measuring Camp Impacts: The National 4-H Camp Tool Kit for Program Planning and Evaluation*. Contact Dr. Jill Martz at jmartz@montana.edu.

National 4-H Headquarters. (1999). Essential Elements Overview. Retrieved January 4, 2010 at http://4htools.cals.arizona.edu/cssSite/essentialElements.cfm

Roth, J., Brooks-Gunn, J., Murray, L., & Foster, W. (October 1998). Promoting healthy adolescents: synthesis of youth development program evaluations. *Journal of Research on Adolescence*, 8(4), 423 – 459.

USDA. (2008). *National 4-H Fact Sheet.* Retrieved May 5, 2010 from: www.national4-hheadquarters.gov/library/2008-ES237-stats.pdf.

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# Fertile Ground: Assessing the Public Library as a Context for Preparing Youth for Community Engagement

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# Fertile Ground: Assessing the Public Library as a Context for Preparing Youth for Community Engagement

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**Abstract:** Libraries provide settings where youth can experience positive development. However, many young people and their families do not access the potential these institutions afford their communities. In addition, library staff are seldom presented with opportunities to work more intimately with young people visiting the library. This article provides data on library staff and their feelings toward youth and their experiences interacting with young people in their local libraries. The findings of the study reveal that library staff members have an array of perceptions toward young people and how youth can be affected.

## Introduction

Research studies and evidence-based evaluations have revealed that youth development occurs regardless of a child's situation or the place of residence, whether in a positive or negative atmosphere. Families, youth-serving agencies and communities reserve the right to ensure that young people have affirming experiences throughout the developmental stages. This is most likely to occur within settings where youth are nurtured and feel welcomed.

According to a 2002 commentary by Pittman and Yohalem, there is a trend to enlist community assets as a means to support young people in their educational pursuits and development. For communities, the most logical conclusion is to utilize those facilities where young people congregate, and more specifically, those places offering varied forms of education and civic engagement opportunities within a safe environment. However, venues that support out of school time are limited in many communities, at a point when they are desperately needed the most. Studies show that youth involved in structured out of school time receive less exposure to risk factors, fewer chances to engage in sexual activities and less inclined to become victims of crime (Little, Wimer & Weiss, 2008; Newman, Fox, Flynn, & Christeson, 2000).The challenge remains in going beyond a prevention approach to present youth with access to opportunities that can determine more success in their lives. This must commence with places serving as

positive settings that welcome, affirm and nurture the developmental need of the young people who frequent their facilities.

Over the past several years, a number of assessments have been conducted to determine the needs of young people when they are not in school (i.e., after school, summer). One of the more comprehensive reports emerged more than a decade ago when the Carnegie Council on Adolescent Development published the report, *A Matter of Time* (1992), which revealed what young people wanted during out-of-school time. The report included national data which revealed that America's youth have stressed the importance of having stronger connections with caring adults, more opportunities to give back to their communities, protection from drugs and violence and be afforded more meaningful experiences in the non-school hours. Although programs are quintessential in achieving these goals, the majority of the data revealed that youth suggested the importance of having places to go in order to meet their social, cultural, and educational needs (Forum for Youth Investment, 2005).

Schools are inherently the premier source for providing a structured environment for learning. However, youth development is not confined to four walls; yet it is a constant process that occurs over a significant period of time. In order for youth to gain those protective factors that are pertinent to achieving mastery in social skills, self-efficacy, and academic prowess, youth development professionals must consider all resources within a community to make sure young people have access to positive youth development. That is, all of the resources necessary for youth to move from childhood into productive responsible adulthood. It has been well documented that youth should have a role in this process, preferably in the form of decision-making within their communities.

Most young people (particularly teens) are very much aware of the social ills that plague their families and community. However, having a chance to become civically engaged within the community is often nullified by a lack of opportunities and places to provide a forum for youth decision-making. Moreover, the negative perceptions of adults often propose the largest barrier. This article highlights the perceptions staff working at community-based libraries have about youth. The authors provide insight on how the attitudes of these individuals can play a part in discouraging youth from taking advantage of the resources offered through community-based libraries. An additional emphasis is also placed on the role specific interactions between adult library staff and young people who frequent libraries can play to curb negative perceptions. The purpose of this article is to stimulate further discussion on the importance of making sure youth are solicited as stakeholders in community development, with local libraries being considered as a common place that nurtures the process.

## Literature Review

Young people comprise a significant percentage of public library patrons. National data has reported that at least 65% of library users are ages 18 and under, with 23% within the range of 12 to 18 years of age (National Center for Educational Statistics, 1995).Young people (more specifically, teens) are coming to the library more often and staying longer. Hence, they are flocking to libraries for reasons far beyond the traditional usage, such as checking out books. Libraries serve as a prominent location for free access to computers and the internet. Young people are coming to the library more to complete homework, conduct research and connect with peers (whether face to face or via social networking websites). In addition, because libraries tend to be located in or near neighborhoods and within walking distance from homes and schools, they have become popular places to "hang out." However, for some areas, this has served as a contrast for fostering youth development. Some libraries have viewed the gathering of youth more as loitering and not the positive peer interaction that is pertinent to social skill development. As a result, several have responded by closing down early. According to a New York Times article (Kelley, 2007), a New Jersey Public library closed its doors from 2:45 to 5:00

P.M. in direct response to "rowdy teenagers." Although some young people can exhibit behavior problems, this mode of operation can put up hurdles that deprive deserving youth of opportunities that can promote positive development within their communities.

In the past, research has documented the needs of youth in our society. If young people are going to become productive adults, there must be certain features and settings in place to ensure that they have what is necessary to become competent citizens. Eccles & Gootman (2002) presented a list of features that maximize positive development within families, schools, neighborhoods and community-wide programs. As many scholars have revealed, it is important to intentionally consider all of these contexts, for each is unique in its inclusivity and influence of youth in some way. Youth interact within these various settings, invoking youth development to occur as a natural process. Eccles & Gootman (2002) noted the settings specifically as physical and psychological safety, appropriate structure, supportive relationships, opportunities to belong, positive social norms, support for efficacy and mattering, opportunities for skill building, and integration of family school and community efforts. All of these entities are provided through the services that can be accessible to youth via local libraries.

Most libraries are considered as designated safe places, a key element for youth to experience positive interactions and engage in skill building. Furthermore, libraries provide a structured environment that is conducive, not only to learning, but also in promoting a sense of community. All typically have clear rules that feed into positive social norms, which in turn, help youth learn of ways to govern behavior. Moreover, when serving as a synergistic tool between systems that serve young people, all of the aforementioned settings (see Eccles & Gootman, 2002) provide the best experiences for youth. As civic institutions within communities, libraries offer a place of developmental resources and assets that youth can draw upon to cultivate the skill sets needed to effectively participate in today's society (Benson, 1997; Moellman & Tillinger, 2004). This may include engaging in supportive relationships with adults who assist youth in acquiring the proficiency to serve their communities. With the wealth of information, youth are also at liberty to learn more about their community in general, thus generating thriving prosocial behaviors that demonstrate neighborhood pride. Researchers have reported that the more community based programs (such as those available at libraries), the longer the effects of protective factors abound, much more than what school-based programs could achieve alone (Dryfoos, 2000). Hence, integrating community-based services to promote youth development may repel some of the detriments that can result in a host of problem behaviors. Therefore, utilizing the local library to foster a sense of community connectedness is a worthwhile endeavor.

In 1998, the Dewitt Wallace-Reader's Digest Fund (in collaboration with the American Library Association), put forth a new initiative to assist public libraries in developing programs and activities that work in tandem with organizations to provide services and support systems for youth. A national survey was mailed to 1500 public libraries in the United States serving populations of 100,000 or more. There was an 83% response rate with all but a few of the libraries indicating that they offered programs for school-age youth (American Library Association, 1999). Data gathered included information on six common types of programs: Reading programs (99.6%); Cultural programs (82%); Community service/leadership programs (42.2%); Computer classes (33.2%); Homework assistance (23.4%), and; Career development (19.2%). A majority of the responses indicated that libraries expected to serve more youth during the following year. The data also revealed that most of the public libraries collaborated most often with schools and local organizations to promote youth programming.

Unfortunately, there is a frequent disconnect between youth and adults due to low levels of interaction and stereotypical views. Gilliam and Bales (2001) found that adults view teens through their own lens, thus comparing them to their adolescent experience. They believe today's teens are without the values of those in the past and often associate youth with

negative trends. Lee, Farrell, and Link (2004) also found supporting evidence that the media serves as a driving force, feeding the minds of adults with negative images about today's youth. Research studies have provided strong evidence that adult perceptions of youth are often negative and may impact the rate at which young people engage in opportunities within the community. Jones and Perkins (2006) reported that adults with positive perceptions of youth can engage youth in specific issues, thus energizing youth to contribute to their communities and become more assertive in reaching their full potential. However, young people must have access to places that offer an environment with caring adults who are willing to foster their healthy development (Rhodes, 2002). Places of consideration should include those that can encourage youth to become more knowledgeable and civically-engaged. Libraries provide a fertile ground to expose adults to the power of youth whether by allowing them to work together as partners or by serving youth through program efforts.

## Purpose of the Study

This study was developed to assess the perceptions library staff members have toward youth within their (library's) communities. The desired outcomes of the study aimed to:

- raise awareness among library staff and to increase their understanding and knowledge of young people;
- increase individual capacity by encouraging positive interaction between youth and adults, and;
- create positive experiences for youth in the public libraries by offering a welcoming environment that serves as a source for generating a sense of community among young people.

The population consisted of staff from public libraries throughout a state of the southern United States. Participants were identified with the assistance of the state's Department of Libraries and Archives. The research agenda included conducting an assessment to measure perceptions toward young people, connections with young people at the library and rating the level of support for young people. Participants from local public library branches included: reference librarians, library assistants, supervisors, and directors. A majority of the libraries represented in the study were located in rural areas, although a few were located in urbanized areas.

## Methodology

The survey instrument used to gather data was developed and pilot-tested using 32 library staff members that were not participants of this study. The survey assessed four attitudinal constructs: *Support for Young People in the Community; Youth in the Community; The Local Library as a Youth-Centered Environment; and Personal Connections with Youth.* A pilot test was conducted to determine the reliability of the instrument, yielding the following Cronbach coefficient results: Support for Young People (.84); Youth in the Community (.84); Local Library as a Youth-Centered Environment (.89), and; Personal Connections with Youth (.71). Expert criterion validity was employed by using a panel of experts (including employees of the state's Department of Libraries and Archives). The panel was also assembled to determine levels of cultural sensitivity and content validity of the survey.

Participants (i.e., library staff) from 61 public libraries were surveyed over the course of six months, with a total of 239 participants completing the survey. A majority of the sample consisted of Whites (84%), followed by African American (6%), Hispanic/Latino (1.7%), Asian (1.3%), Native American (0.4%). Most (80%) of the participants were females. A majority (72%) of the participants had pursued education beyond high school, obtaining an associate's degree or higher. More than 80% were over the age of 30, having a minimum of 1-3 years of

experience as librarians. Over 67% lived and worked in the same community. Additional demographics are included in Table 1.

**Table 1**
Demographics

| Demographics | n | % |
|---|---|---|
| Tenure with Current Job | | |
| Less than 1 year | 28 | 11.7 |
| 1-3 years | 68 | 28.4 |
| 4-9 years | 74 | 30.9 |
| 10-15 years | 26 | 10.8 |
| Over 15 years | 34 | 14.2 |
| No Response | 9 | 4.0 |
| Length of time living in current community | | |
| Less than 1 year | 10 | 4.2 |
| 1-3 years | 26 | 11.0 |
| 4-9 years | 43 | 18.2 |
| 10-15 years | 31 | 13.1 |
| More than 15 years | 126 | 53.4 |
| No Response | 3 | 0.1 |
| Job responsibility of working directly with youth? | | |
| Yes | 201 | 84.1 |
| No | 34 | 14.2 |
| No Response | 4 | 1.7 |
| Library has teen advisory board | | |
| Yes | 88 | 36.8 |
| No | 139 | 58.2 |
| No Response | 12 | 5.0 |
| Number of youth observed using the library in a given week? | | |
| None | 2 | 0.8 |
| 1-25 | 40 | 16.7 |
| 26-50 | 52 | 21.7 |
| 51-75 | 51 | 21.4 |
| 76-100 | 23 | 9.7 |
| Over 100 | 57 | 23.8 |
| No Response | 14 | 5.9 |

## Results

The attitudinal constructs were based on a scale from 1 to 5, with 1 being "strongly disagree" and 5 being "strongly agree." Participants were fairly neutral on all constructs relating to their perceptions of youth in their communities. Library staff viewed support for youth in the community at 3.04 (on a 5-point scale). Items used to measure this construct included: "There is an adequate amount of support systems for youth," "Adults provide positive supportive environments," and "Parents support efforts that encourage youth to do well in school." When asked about the perceptions of youth in general, participants had slightly less than neutral perceptions (2.96). Some items used to comprise this construct included: "Youth in the community make good leaders," "Youth are very responsible," "Youth are motivated to excel," and "Youth are interested in helping to improve the community." When reporting on whether

the library in which they work incorporates youth-centered principles, staff had more positive perceptions (mean = 3.56). They agreed to specific items such as: "Our library is a part of young peoples' lives," "Our library provides a safe environment for youth," "We provide programs of interest to youth," and "We value youth as a part of our mission." Lastly, in assessing their personal connections with youth, library staff remained neutral (3.00). Items used to create this construct included: "I work well with young people," "I fully understand youth in this community," and "I enjoy interacting with young people." Table 2 shows the means of participants' responses.

**Table 2**

Perceptions of Library Staff toward Youth in the Local Library (n = 239)

| **Construct** | **Mean** | **S.D.** |
|---|---|---|
| Support for Youth in the Community | 3.04 | .48 |
| Perceptions towards Youth in the Community | 2.96 | .43 |
| Library has a Youth-Centered Focus | 3.56 | .55 |
| Personal Connections with Youth | 3.00 | .56 |

*Note. Scale: 1= strongly disagree; 2=disagree; 3=neutral; 4=agree; 5= strongly agree*

Table 3 provides survey data on the comparison between those library staff members who had youth councils in their libraries and those without councils. These councils varied in levels of responsibility. Some staff reported that their council helped with duties, such as organizing youth programs at the library, while other councils served as a library outreach component to aid the larger community (e.g., assist with neighborhood clean-ups, conduct food drives for needy families). A series of independent t-tests were conducted to compare those libraries with youth councils to those without councils. The analyses revealed a statistically significant difference between those libraries that had a youth-centered focus (3.81 vs. 3.50). Those library staff members at libraries with youth councils were more positive towards their role in providing youth with opportunities and support systems.

**Table 3**

Perceptions of Staff with Councils and those without Councils

| **Support for Youth in the Community** | | | | | | |
|---|---|---|---|---|---|---|
| | n | Mean | S.D. | t | df | p |
| Libraries with Youth Councils | 36 | 3.16 | .39 | 1.68 | 131 | .09 |
| Libraries with no Youth Councils | 97 | 3.01 | .46 | | | |
| **Perceptions toward Youth in the Community** | | | | | | |
| Youth Council | 36 | 3.02 | .34 | .117 | 131 | .90 |
| No Youth Council | 97 | 3.01 | .41 | | | |
| **Libraries having a Youth-Centered Focus** | | | | | | |
| Youth Council | 36 | 3.81 | .37 | 3.81 | 93.85 | .00* |
| No Youth Council | 97 | 3.50 | .53 | | | |
| **Personal Connections with Youth** | | | | | | |
| Youth Council | 36 | 3.64 | .62 | .66 | 132 | .53 |
| No Youth Council | 97 | 3.57 | .52 | | | |
| | | | | | | |
| | | | | | | |

*Note. *p< .001*

Since one purpose of this study was to examine the influence of perceptions on youth in communities, data were examined to determine if specific demographic variables influenced

perceptions. Regression analyses were used to compare library staff based on the following independent variables: age; years of experience; length of time living in their community; whether or not they live and work in the same community; having responsibility of working directly with youth; and youth council vs. no youth council.

## Table 4

Standardized Regression Coefficients for Library Staff Perceptions of Youth in the Community

| | **Support for Youth** | | **Youth-Centered Libraries** | | **Personal Connection with Youth** | |
|---|---|---|---|---|---|---|
| | β | (SE) | β | (SE) | β | (SE) |
| Age | -.052 | .074 | -.041 | .081 | -.102 | .086 |
| Years of Experience | -.085 | .075 | -.046 | .082 | -.134 | .086 |
| Time Living in Community | .092 | .075 | .048 | .082 | .074 | .085 |
| Live/work in Community | .026 | .071 | .010 | .078 | .121 | .081 |
| Work with Youth | .124 | .094 | .257 | .105* | .295 | .105*** |
| Youth Councils | .168 | .067* | .344 | .073** | .038 | .076 |
| | | | | | | |
| N | 205 | | 207 | | 209 | |

*Note. *= p<.05; ** = P< .001; *** = p< .01*

Only one factor (Libraries with youth councils) was found to be a significant predictor in a hierarchical regression model for the construct, Support for Youth. Library staff who reported having a youth council at their library had more positive perceptions of there being a high level of support for youth in their community. When determining whether the library was youth-centered, thus providing a youth-friendly atmosphere, there was a more positive association stemming from staff who had youth councils in place and who work directly with youth as one of their job responsibilities. Together, these predictors explained 12% of the variance, that local libraries provide opportunities and support systems for youth. There was also a positive relationship between those staff members who have the responsibility of working directly with youth and their perception of having a personal connection with young people. In summary, staff who worked directly with youth were more likely to work in libraries that present a youth-centered environment. They also expressed having stronger connections with young people. There were no significant predictors revealed when examining staffs' general perceptions of youth in the community.

## Conclusion

The findings of this study revealed that library staff members have an array of perceptions toward young people. Based on the attitudinal constructs, library staff were consistent in their neutral feelings toward youth in the community, as well as their experiences interacting with young people in the local libraries. Although they had positive perceptions toward the services they provide to young people within their libraries, they indicated less positive perceptions toward youth in general. This resonates with the work of scholars who have argued how perceptions can aid or hinder the youth development process for young people.

The attitudes of library staff can play a significant role in helping youth to perceive the local library as a part of their community where they have access to meaningful opportunities. Young people make up the ecological stratum that compiles the complexities of a community. The time is now to search for ways to support their development by utilizing local resources as tools that enhance their lives. Libraries are local resources with a mission to serve all members of the

community and a place that can be an important and positive developmental setting for young people. Hence, these facilities provide physical and psychological environments that are safe and supportive. The next step is for libraries to intentionally create opportunities for positive interaction and engagement. Many libraries already have plans in place to promote citizenship, while others are establishing the partnerships and staff capacity building essential for achieving desired outcomes. With libraries serving as valued commodities in most communities, there is the potential for significant change when they are intentional about affording young people the chance to engage in purposeful roles in the library and the community.

One of the most prominent factors found to serve as a predictor included those staff members who worked directly with youth. Staff who worked directly with youth were more positive towards two attitudinal constructs. Moreover, they believed that they provided a youth-centered atmosphere and had stronger personal connections with those young people using the library. This relates to previous findings in the literature which indicates that when youth and adults have opportunities to work together, positive perceptions flourish (Jones, 2006). Such evidence also connects with the research around intergroup contact theory (Allport, 1954), which argues that when community residents come together to connect on comparable ideas, they begin to see that they have more commonalities than differences (Hewstone, 1996; Pettigrew, 1998). Therefore, relationships for youth and adults to interact in positive and meaningful ways are nurtured. This can be as rudimentary as events integrated into existing programs such as youth advisory councils, youth library internships, community service projects and youth-led learning opportunities.

Findings also revealed that libraries with youth councils had more positive staff. These participants indicated more positive views in providing a youth-focused library environment than those libraries without youth councils. Youth councils were not the same at each library. However, most of the councils were in place for youth to offer some direction to the staff on how to provide opportunities for youth. It is understandable why these staff members would be more positive; for they are going directly to the source (young people) to discover their needs. These councils also give young people a chance to utilize their skills during out-of-school time, instead of providing them with no constructive activities in the libraries. This helps to negate the pessimistic feelings that adults may have toward youth "hanging out" in the library. Hence, libraries empower youth to do something constructive that is witnessed by the entire community. These same opportunities can also offer young people outlets that abate the negative perceptions and behaviors that can occur when no structure is in place.

Encouraging stronger, positive interactions may develop through youth-adult relationships, which can, in turn, be worthwhile endeavors at local libraries. This was evident among those staff persons who worked directly with youth, as well as those libraries with youth councils. One strategy to promote stronger relationships that can aid community development is to incorporate youth in the decision-making process. At the same time, it's critical to keep in mind that the power sharing may be a challenge for adults. Although the body of literature on the benefits of youth-adult partnerships and what is learned through these collaborations has expanded, there remains a need to conduct studies and promote innovative practice that provide solutions to understanding how youth and adults can work together on behalf of their communities (Zeldin, Camino, & Mook, 2005). One strategy is by educating those that work with youth, whether directly or indirectly. Many library systems are making a commitment to providing training and development for all ranges of library staff to increase their knowledge and skills in working with and empowering youth. In the state participating in this study, the Department for Libraries and Archives contracted with a youth development training organization to deliver twelve hours of hands on training for over 400 public library staff across the state. Participants ranged from library directors to security and janitorial staff.

Although this study did not explore additional challenges affecting libraries based on location or assets, many of the more rural and older libraries typically have limited resources and therefore do not have the space or time to dedicate adequate opportunities that engage young people in community affairs at higher levels. Many have to operate on budgets where they meet the immediate needs of residents (e.g., providing reading/reference materials, access to the internet) with little efforts allotted towards providing services that promote community empowerment. However, it does not inhibit space or time to invest in transforming a library into a positive youth-centered setting. Yet, it requires a commitment from all stakeholders, from board members to staff, that are earnest about the developmental needs of the young people who walk through their doors.

Staff development is critical if libraries are to accept the call as a salient contributor to youth development within a community context. As with any environment where youth-adult interaction ensues, the library in itself is another example of a community where many adults distance themselves from their memories incurred during the adolescent years. Hence, some staff may have a hard time understanding today's young person. Add in the societal changes and technological advances teens have so readily adapted and therein provides a significant number of adults who impose a level of discrimination towards youth by treating them differently than other library patrons. As previous studies have shown, more research and practical strategies are needed to reverse the lack of knowledge that exists among library staff to communicate and connect with youth. In order for communities to empower young people, there must be at least a willingness to embrace youth culture.

## Recommendations

A community core is not complete without a library, which is known to serve youth and therefore should consider services that afford a chance for young people to come together to help themselves and even more so, their community. Libraries can serve in various capacities, from a meeting space for youth clubs to serving as the headquarters of a community youth-adult taskforce poised to address critical issues. When considering youth gaining exposure to citizenship, structured formal environments have been held in high regard as the means to teach students about the importance of civic awareness. However, in order to be effective in community affairs, the most sufficient preparation has normally provided hands-on experiences occurring within non-formal or informal settings. Young people do not experience frequent training in community organizing. Ironically, many of today's youth are driven by a desire to make a difference. Local libraries within the neighborhoods can serve that purpose for such an educative experience. Below are a few recommendations when considering libraries as a vessel for strengthening communities via the efforts of young people:

- Maintain consistency in making training available to library staff. Positive development is today's model for advancing the lives of young people. However, it takes time and effort to make sure adults have the wherewithal to make this happen. Professional development opportunities are pertinent if staff are to be a part of this progression.
- Recruitment efforts should continue focusing on staff in all age ranges. This study reflects that there is diversity in the age of staff, in which all noted positive experiences with youth. Each can offer the most important factor in the lives of youth – caring, supportive adult interaction.
- Staff should have more opportunities to work directly with youth. Those staff members with direct contact (whether it's reading to youth, helping them with a class assignment or serving as an advisor to the youth council) indicated more positive perceptions. Research has shown that positive interaction between youth and adults is a meaningful experience for both parties. This should occur within schools as well as through out-of-school experiences such as the library.

- Constructive time for youth should be considered. Those staff persons who indicated that their library had a youth advisory council had positive perceptions of youth and had more positive feelings about the level of support for youth within their communities. Providing youth with a chance to utilize their skills is an essential element of positive youth development. Moreover, when youth have the chance to engage in civic affairs, they become more in tune with their community while making a difference at the local level.

## References


Allport, G.W. (1954). *The nature of prejudice*. New York: Doubleday Books.

American Library Association. (1999). *Survey of Programs for School-Age Youth in Public Libraries.* Technical report to the Dewitt Wallace-Reader's Digest Fund. Available on line at: http://ftrf.org/ala/yalsa/profdev/DeWittWallaceSurvey.pdf

Benson, P.L. (1997). All kids are our kids: *What communities must do to raise caring and responsible children and adolescents.* San Francisco: Jossey-Bass.

Carnegie Council on Adolescent Development. (1992). *A matter of time: Risk and opportunity in the non-school hours.* New York, NY: Carnegie Corporation of New York.

Dryfoos, J.G. (2000). *Evaluation of community schools: Findings to date*. Coalition for Community Schools. Available online at: www.communityschools.org.

Eccles, J.S., & Gootman, J.A. (Eds.). (2002). *Community programs to promote youth development.* Committee on Community-Level Programs for Youth. Washington, DC: National Academy Press.

Forum for Youth Investment. (2005). *When school is out, museums, parks and libraries are in.* Out-of-School Time Policy Commentary #9. Washington, DC: the Forum for Youth Investment, Impact Strategies, Inc.

Gilliam, F.D., Jr. & Bales, S.N. (2001, July). *Strategic frame analysis: Reframing America's youth.* (Social Policy Report, 15(3) of the Society for Research in Child Development). Available online at: http://www.srcd.org/sprv15n3.pdf.

Hewstone, M. (1996). Contact and categorization: Social-psychological interventions to change intergroup relations. In C. N. Macrae, C. Stagnor, & M. Hewstone (Eds.), *Foundations of stereotypes and stereotyping* (pp. 323-368). New York:Guilford.

Jones, K.R. (2006). Relationships matter: A mixed methods evaluation of youth and adults working together as partners. *Journal of Youth Development, 1*(2). Available online at: http://www.nae4ha.org/directory/jyd/current_issue.aspx

Jones, K.R. & Perkins, D.F. (2006). Youth and adult perceptions of their relationships within community-based youth programs. *Youth and Society, 38*(1), 90-109.

Kelley, T. (2007, January 2). Lock the library: Rowdy students are taking over. *The New York Times.*

Lee, B.A., Farrell, C.R., & Link, B.G. (2004). Revisiting the contact hypothesis: The case of public exposure to homelessness. *American Sociological Review, 69*, 40-63.

Little, P.M.D., Wimer, C., & Weiss, H.B. (2008). *Afterschool programs in the 21st century: Their potential and what it takes to achieve it.* Harvard Family Research Project report: Cambridge, MA: Harvard Graduate School of Education.

Moellman, L.W., & Tillinger, J.R. (2004). Civic spaces: Retooling public libraries to attract and engage teens after school. *Afterschool Matters, 3*, 28-36.

National Center for Educational Statistics. (1995). *Services and resources for children and young adults in public libraries*. U.S. Department of Education, Office of Educational Research and Improvement: Washington, DC. Available online at: http://nces.ed.gov/surveys/frss/publications/95357/

Newman, S.A., Fox, J.A., Flynn, E.A., & Christeson, W. (2000). *America's afterschool choice: The prime time for juvenile crime or youth achievement and enrichment.* Washington, DC: Fight Crime: Invest in Kids. Available at: http://fightcrime.org/reports/as2000.pdf

Pettigrew, T.F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, pp. 65-85.

Pittman, K., & Yohalem, N. (2002). *Off the Shelf and into the Field: Making the Most of the National Research Council's New Report: Community Programs to Promote Youth Development.* Washington, D.C.: Forum for Youth Investment. Available online at: http://www.forumforyouthinvestment.org/files/OffTheShelf.pdf

Rhodes, J. (2002). *Stand by me: The risks and rewards of mentoring today's youth.* Cambridge, MA: Harvard University Press.

Zeldin, S., Camino, L., & Mook, C. (2005). The adoption of innovation in youth organizations: Creating the conditions for youth-adult partnerships. *Journal of Community Psychology, 33*(1), 121-135.

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# Does Marital Status of Parents Relate to Family Communication Regarding Finances?

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# Does Marital Status of Parents Relate to Family Communication Regarding Finances?

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**Abstract:** How do youth and parents perceive their communication with each other? How do they perceive communication about money with each other? Are there differences between married-parent families and single-parent families? The reported study examined the discrepancies in perception between parents and youth and compares these differences between married and single-parent families. Although single-parent families had greater discrepancies in perceptions regarding communication in general, there was no evidence of such differences in discrepancies regarding communication about money. The finding suggests the importance of youth development programs to provide information and encouragement to both youth and their parents.

## Introduction

There is a growing concern among public policy makers, educators, and researchers about financial literacy in the U.S. population. These concerns are due in part to low and negative savings rates, record high levels of consumer debt and bankruptcy, risky mortgage borrowing coupled with abusive lending practices, and insolvent households (Bernanke, 2008; Bernheim, Garrett, & Maki, 2001; Braunstein & Welch, 2002; Greenspan, 2003; Warneryd, 1988). In 2003, then Chairman of the Federal Reserve Board, Alan Greenspan cited rising financial stress as one reason for the growing need for financial and economic literacy education (Greenspan, 2003). Those same concerns have been expressed by Chairman Bernanke (2008). Because of the growing concern for the financial literacy of youth and adults in the United States, the U.S. Treasury created the Office of Financial Education in 2002 to promote financial education. The President's Advisory Council on Financial Literacy was created in 2008 to assist citizens in understanding and addressing financial issues (United States Department of the Treasury, 2009).

Alan Greenspan (2003) noted that financial and economic education needs to start early in elementary and secondary school. In his comments, he referred to the positive outcomes of high-school based programs sponsored by the National Endowment for Financial Education (NEFE) and to positive outcomes from several other studies as well. Currently, only three states require at least one school course in personal finance. Sixteen states require the incorporation

of personal financial topics into other subjects (Jump$tart, 2008). Other states have no requirements, but may offer a personal finance course as an elective. This low level of financial education in primary and secondary schools suggests that other efforts to influence the financial literacy of young people are needed.

Financial literacy education is largely the responsibility of parents in partnership with schools and other youth-serving organizations. Yet, financial education in primary and secondary schools has been undertaken with little or no consideration of the influence or impact of parents. The financial behavior of the parent, the family structure, and the level of communication between parents and children about savings and other financial behaviors influence, for better or worse, children's financial knowledge and behaviors. Several researchers have found that the financial management knowledge and behaviors of parents are associated with the financial knowledge and behaviors of youth (Bowen, 2002; Mandell, 2001; Prichard, Myers, & Cassidy, 1989). In addition, research by Kourilsky and Murray (1981) and by Lachance, Legault, and Bujold (2000) suggests that family structure may also influence parent-child communication about money and consumer decisions.

Youth who grow up in households where they are taught or exposed to savings may be more likely to begin a savings program and to consistently save as they grow older. Therefore, a better understanding of how and whether family communication about money is related to the financial behaviors of youth can benefit educators and other practitioners. The findings of this study are useful for educators who want to develop effective educational programs for youth and their parents. The findings are also useful for practitioners who design campaigns to increase the financial literacy and savings behaviors of individuals. The purpose of our study was to examine the impact of parents' marital status on the discrepancies between the perceptions that parents and youth have about communication both in general and about money.

## Background

Researchers have focused on family communication and consumer socialization of youth, but limited research has investigated communication between parents and youth about financial management. Studies of communication among parents and children on other topics (Carlson, Grossbart, Stuenkel, 1992; Moschins, 1985) suggest that family discussion of savings could improve the knowledge among youth (Carlson, Grossbart, Stuenkel, 1992; Moschins, 1985). More specifically, such discussion may have a significant impact on youth who currently do not see the importance of savings. According to Mandell (2001), financial management discussions between parents and children were associated with the financial knowledge of the children. The savings behavior of parents may transmit to youth, but research in this area is limited.

While researchers have focused on the consumer socialization of children, little attention has been given to the impact of parents' marital status and how it might affect consumer socialization. Mimura, Koonce, Mauldin, Rupured, and Jordan (2008) found that communication about saving within the family was influenced by the parent's savings knowledge, parental self-efficacy, the marital status of the parent, and family (parent-youth) communication in general. Lachance, Legault, and Bujold (2000) found an association between family structure and parent-child communication on consumer issues, youth participation in consumer tasks, and youth participation in decision-making.

With regard to financial knowledge and behaviors, little is known about the association between family structure and parent-child communication on financial literacy or behavior. Clarke, Heaton, Israelsen, and Eggett (2005) included parents' marital status in an analysis of financial transference of adult roles. Parents' marital status was not significant, but as the authors pointed out, most of the young people in their study sample were from married parent families.

Until recently, researchers have paid little attention to the impact of the marital status of parents on parent-child communication about financial management. For this study the literature on parent-child communication about consumer issues is grounded in consumer socialization theory (Flurry, 2007; Lachance, et al., 2000), which suggests an association between parent-child communication and the marital status of the parents.

Lachance, et al. (2000) found that family structure was associated with adolescent participation in family consumer tasks and decisions. Adolescents living with single-mothers were more involved than those living with two parents. Single parents were more likely to use communication practices with regard to consumer issues that attempt to encourage adolescents to live their own experiences and to develop their own consumer abilities. There was generally more communication related to consumer issues in one-parent than in two-parent families.

At the same time, parental style was found to be more important than family structure in adolescents' consumer socialization. Flurry (2007) argued that through participation in family decision-making, children raised in different types of families learn norms, roles, and consumer skills, and are thereby able to exert influence on purchase decisions. Two studies were conducted: one on 4$^{th}$ and 5$^{th}$ graders in public school and the other on mothers of children aged 9 to 11. Flurry (2007) found that children in divorced, single-parent families had the greatest influence in the purchase of child products, whereas children living with single, never-married parents had the least influence in the selection of child products.

In summary, research on family structure and consumer socialization suggests that parent-child communication about financial issues may vary according to parents' marital status. It is hypothesized that the communication discrepancy between parent and youth among single-parent families will be less than that between parents and youth in married-parent families. Both general communication and communication regarding money between the parent and youth were examined.

## Methods

### Data and Sample

The present study used survey data collected from youth age 14 to 19 in Georgia and from the parent with whom the youth communicated the most about financial issues. The survey was designed to explore parent-youth communication about savings and investments and the financial knowledge and behaviors of parents and youth. The survey instrument for this study included a portion of the questions developed by the research team of the NC 1013 multistate research project "The Economics and Psychological Determinants of Household Savings Behavior," with additional questions to capture parent-child communication about money and savings (Multistate North Central Research Project 1013, 2007). A total of 132 youth who participated in a state-wide 4-H event in December 2006 and their respective 132 parents who responded to the survey were included in this study. Among the 132 parents, 113 were married and 20, or 15%, were not married.

### Procedure

This study examined communication items used in the survey to compare the responses of youth from single-parent families and those from married-parent families. Both, the youth and the parents responded to 30 items separately. The particular interest was in knowing if the discrepancies in the perception toward communication varied between single-parent families and married-parent families.

## Table 1

*General Communication*: Matched Survey Items for Parent-Youth Communication Assessment*

| Choice of the answer and coding | |
|---|---|
| 1. Strongly disagree<br>2. Disagree<br>3. Neutral<br>4. Agree<br>5. Strongly agree | |
| Question for parents | Matching question for youth |
| 1. Sometimes I have trouble believing everything my child tells me. | 1. Sometimes I have trouble believing everything this parent tells me. |
| 2. My child is always a good listener. | 2. This parent is always a good listener. |
| 3. I am sometimes afraid to ask my child for what I want. | 3. I am sometimes afraid to ask this parent for what I want. |
| 4. My child can tell how I'm feeling without asking. | 4. This parent can tell how I'm feeling without asking. |
| 5. I am very satisfied with how my child and I talk together. | 5. I am very satisfied with how this parent and I talk together. |
| 6. If I were in trouble, I could tell my child. | 6. If I were in trouble, I could tell this parent. |
| 7. I openly show affection to my child. | 7. I openly show affection to this parent. |
| 8. When I ask questions, I get honest answers from my child. | 8. When I ask questions, I get honest answers from this parent. |
| 9. My child tries to understand my point of view. | 9. This parent tries to understand my point of view. |
| 10. I find it easy to discuss problems with my child. | 10. I find it easy to discuss problems with this parent. |

*Adapted from: *Parent-adolescent communication* (Barnes & Olson, 1985).

The communication items assessed were in two categories. One was on general communication between the parent and the youth, presented in Table 1. The other was on communication between these two regarding money, presented in Table 2. All questions concerned the communication between these parents and the youth. Some items asked both parent and youth about the exact same issues, while the others asked them about each other; thus the wording was different on the parental and youth versions of the surveys.

## Table 2

*Communication on Money*: Matched Survey Items for Parent-Youth Communication Assessment*

| Choice of the answer and coding | |
|---|---|
| 1. Always | |
| 2. Sometimes | |
| 3. Neutral | |
| 4. Almost never | |
| 5. Never | |
| **Question for parents** | **Matching question for youth** |
| 1. I talk to my child about buying things. | 1. This parent and I talk about buying things. |
| 2. I go shopping with my child. | 2. I go shopping with this parent. |
| 3. I tell my child what things he or she should or should not buy. | 3. This parent tells me what things I should buy or not buy. |
| 4. I tell my child what to do with his or her money. | 4. This parent tells me what they do with their money. |
| 5. I talk to my child about things we see or hear advertised. | 5. This parent talks about things we see or hear advertised. |
| 6. I tell my child why I bought some things for myself. | 6. This parent tells me why they bought some things for themselves. |
| 7. I talk to my child about saving and investing money. | 7. This parent and I talk about saving and investing money. |
| 8. I talk to my child about things I should save for. | 8. This parent and I talk about things I should save for. |
| 9. I communicate with my child about money management. | 9. This parent talks to me about money management. |
| 10. I discuss the importance of saving with my child. | 10. This parent discusses the importance of saving with me. |
| 11. I discuss the importance of a budget with my child. | 11. This parent discusses the importance of a budget with me. |
| 12. I discuss the household finances with my child. | 12. This parent talks to me about household finances. |
| 13. I provide my child an allowance. (Recoded as follows to match the question to the youth)<br>0. Never<br>1. Sometimes, neutral, almost never<br>2. Always | 13. Do you regularly receive an allowance from your parents?<br>0. No<br>1. Yes, but only when I do some chores<br>2. Yes, on regular basis |
| 14. I help my child open and maintain an account at a financial institution. | 14. This parent has helped me open and maintain an account at a financial institution. |
| 15. I allow my child to make decisions about household spending. | 15. This parent allows me to participate in decisions about household spending. |
| 16. I help my child develop financial goals. | 16. This parent helps me develop financial goals. |
| 17. I allow my child to manage their own money. | 17. This parent allows me to manage my own money. |
| 18. I discuss the trade-offs and consequences of my child's money management decisions. | 18. This parent discusses trade-offs and consequences of my money management decisions. |
| 19. I tell my child why I save and invest. | 19. This parent tells me for what they save and invest. |
| 20. I tell my child what he or she should do with his or her savings and investments. | 20. This parent tells me what they do with their savings and investments. |

*Adapted from: *Consumption: Interaction Scale* (Moore & Stephens, 1975; Moschis, 1978); *Consumer Activity Scale* (Moschis & Churchill, 1978).

The statistical analyses involved two regression models. Response variables were scores on general communication and money communication, and the explanatory variable was the marital status of the parents. The control variables were the parents' financial knowledge score and self-efficacy, since these two directly affect the family communications about savings (Mimura, et. al, 2008).

The parents' financial knowledge score was based on savings and investing knowledge measured by eight multiple-choice questions taken from the Jump$tart Coalition for Personal Financial Literacy High School survey (Jump$tart Coalition for Personal Financial Literacy, 2004). The financial knowledge score was the percentage of questions answered correctly. The self-efficacy measure included 20 items from the questionnaire (adapted from Bandura, 1977, 1992; Sherer et al. 1982), where the respondents selected the most appropriate level of agreement with the statements using a five-point Likert scale.

The score on *general communication* was calculated by taking the absolute value of the differences between the answers from the parent and the youth on each of ten comparable questions and then summing those differences. The absolute value was used to measure the discrepancy between the perceptions of the youth and the parent. The lowest possible score was zero, and the highest possible score was 40; the higher the score the greater the discrepancy between the parent and youth regarding their perception of their communication.

Similarly, the score on *money communication* was calculated by taking the absolute value of the differences between the answers from the parent and youth on each of 20 comparable questions and then summing those differences. The lowest possible score was zero, and the highest possible score was 80. The higher the score, the greater the discrepancy was between their perception about communication on money matters.

## Results

Table 3 shows the characteristics of the sample. The general communication discrepancy score ranged between 2 to 27 among the survey respondents. The mean score was significantly higher among parents and youth when the parents were not married. In other words, among the single-parent families, there was a larger discrepancy between the parents reporting of the communication with their children and the youth's reporting of the communication with their parents than among married-parent families. The communication about money score ranged from 1 to 40 among the survey respondents. The mean discrepancy in this score was not significantly different between married and non-married families, although the score appeared higher among the parent-youth pairs from single-parent families than among those from married-parent families.

## Table 3

*Sample Descriptions*

| | Marital status of parent | |
|---|---|---|
| | Married | Not married |
| General communication discrepancy score* | 9.64<br>(3.56) | 12.20<br>(6.61) |
| Discrepancy in communication about money | 18.22<br>(7.18) | 19.78<br>(7.33) |
| **Parental control variables** | | |
| Financial knowledge score (% answered correct) | 77.88%<br>(18.38) | 74.38%<br>(22.39) |
| Standardized self-efficacy score | -0.22<br>(5.10) | 1.75<br>(5.90) |
| **Demographic characteristics of parents** | | |
| Gender | | |
| Male | 26.79% | 10.00% |
| Female | 73.21% | 90.00% |
| Race and ethnicity | | |
| African American | 2.65% | 15% |
| Asian or Pacific Islander | 2.75% | 0% |
| Hispanic of any race | 0.88% | 0% |
| White | 92.92% | 85% |
| Other | 0.88% | 0% |
| *N* | 113 | 20 |

*Note.* The numbers are means (standard deviations) for continuous variables and column percentages for categorical variables.
* p<.05

Two control variables, the parental financial knowledge score and the standardized self-efficacy score of the parents, were not statistically significantly different between married and non-married groups. However, it appeared that the knowledge score was slightly higher among married parents than non-married parents, and the self-efficacy score was lower among married parents than among non-married parents.

Table 3 also shows the distribution of gender, race, and ethnicity of the parents within each of the marital status groups. About a quarter of the married parents who responded to the survey were male, while only 10% (n=2) of the non-married parents were male, although the difference was not statistically significant. A majority of the parents in both groups were non-Hispanic White, 93% of married parents and 85% of non-married parents. None of the non-married parents and very few of the married parents claimed they were primarily Asian or Pacific Islander, Hispanic, or of other race. As there were no variations between the two family types, gender and 'race and ethnicity' are not included in the regression models as control variables and are provided in this table solely for the purpose of describing the sample.

Table 4 presents the results of the regression analysis on the general communication discrepancy between the parents and youth. The marital status of the parents was associated with the communication discrepancies between the parties, when the parental knowledge score and the standardized self-efficacy of the parent were kept equal. The parents' score for married parents was 2.40 points higher than that of non-married parents. In other words, non-married parents and their children had a larger discrepancy in perception toward each other in the area of communication than did married parents and their children.

## Table 4

*Summary of Regression Analysis on General Communication Discrepancy between Parent and Youth (N=133)*

| Variable | Parameter Estimate | Standard Error | t-value |
|---|---|---|---|
| Intercept | 10.07 | 1.54 | 6.53** |
| Parent not married (baseline: married) | 2.40 | 1.02 | 2.35* |
| Parental knowledge score | -0.01 | 0.02 | -0.28 |
| Standardized self-efficacy of the parent | 0.07 | 0.07 | 1.02 |

*Note.* $R^2$=.06
* p< .05, **p<. 0.001

Table 5 presents the results of regression analysis on the discrepancy in communication between parents and youths about money. The marital status of the parents was not associated with the variations in the communication discrepancy score, when the parental knowledge score and the standardized self-efficacy of the parents were kept equal. However, it appears the discrepancy score is slightly higher among non-married parent-youth pairs than among married parent-youth pairs.

## Table 5

*Summary of Regression Analysis on Discrepancy in Communication about Money between Parent and Youth (N=133)*

| Variable | Parameter Estimate | Standard Error | t-value |
|---|---|---|---|
| Intercept | 20.12 | 2.67 | 7.52** |
| Parent not married (baseline: married) | 1.69 | 1.77 | 0.95 |
| Parental knowledge score | -0.02 | 0.03 | -0.74 |
| Standardized self-efficacy of the parent | -0.11 | 0.12 | -0.92 |

*Note.* $R^2$=.02
* p< .05, **p<. 0.001

In summary, the perceived discrepancies in communication in general between parents and their children were greater among non-married families than among married families. However, communications about money were not significantly different between single-parent households and married parent households.

## Limitations

One of the limitations of this study is the small sample size. A larger sample would yield more robust analysis. Such a study would provide a greater understanding about the impact of parental marital status and other family structure variables on financial issues and family communication. A larger sample size may allow us to assess the association between some other control variables, such as the parent's gender and educational background, in the models.

Another limitation is the use of 4-H event participants in Georgia. First, the sample is not representative of all youth in the U.S. Second, the sample is not representative of youth in Georgia. In 2006 in Georgia, about 48% of teens aged 15 to 19 were female and 52% were male. Approximately 54% were White alone, 36% were Black alone, 3% were Asian or Pacific Islander alone, and 7% were Hispanic of any race (derived using American Community Survey, 2007). Women and White youth were overrepresented in our sample. In addition to the

differences in a few demographic characteristics, participants in the Georgia 4-H program, the forum participants, and the survey participants may also be different in terms of other less-obvious characteristics such as family values and parenting styles.

## Discussion

An earlier study from the same survey (Mimura, et al., 2008) found there was less family communication about money with youth in married-parent households than in single-parent households. The self-reported perceived communication between youth from single-parent families appeared to be more frequent with a more positive impact on youth savings behaviors than the perceived communication between youth and parents from married parent families. This study was undertaken to further explore parent-youth general and financial communication among married-parent and single-parent households.

Contrary to the proposed hypothesis in the current study, the perceived discrepancy in parent-youth communication about money did not vary among married-couple and single-parent households. Given the small number of single-parent households in this sample (n=20), further research using a sample that includes more single-parent households is needed. Our results are consistent with those of Clarke, et al. (2005), but again, they also had few single-parent households in their sample.

In this study, the discrepancy in perceived communication on financial matters was used as the response variable. Though not tested statistically, the discrepancy on perceived general communication was much less than the discrepancy in communication about money, regardless of the marital status of the parent. Parents perceived they were communicating more about financial issues with their children than the children seemed to pick up from those conversations. This finding suggests the need for more research about the communication of financial issues between parents and their children.

While this study used the consumer socialization model for its framework, Allen (2008) suggests several other theories to guide future research on parent-child communication on financial issues. One such approach is family communication pattern (FCP) theory based on two different family orientations, one which is concept-oriented and the other which is conformist-oriented. Overview can be found in Koerner and Kitzpatrick (2006). Another possible perspective is found in Allen, Edwards, and Hayhoe, (2007), a study in which family members are asked about imagined discussions among family members on financial topics. Additionally, Allen (2008) suggests symbolic convergence theory and narrative performance theory as possible frameworks for research on parent-child communications about financial matters. Previous research has shown the importance of financial literacy and the influence parents have on children's financial knowledge and behaviors. Given the findings of the present study, expanding the theoretical perspective on financial issues and family communication could help lead to significant improvement in financial literacy outcomes for youth.

With a 133% increase in the proportion of children under the age of 18 living in single-parent families between 1970 and 2006 (28% in a single-parent household in 2006 compared to 12% in 1970) (U.S. Census, 2008), further research is needed to explore financial issues and parents' marital status and whether parents' marital status makes any difference in youth's financial knowledge and behaviors. The limited research in this area suggests that more research, with more single-parent households in the sample, is needed.

## Implications for the Youth Development Practice

The value of competence in financial literacy cannot be overstated. The more financially literate young people are, the more likely they are to save money for future goals and avoid the pitfalls

of credit. This research and the current state of financial literacy education in the United States suggest three important implications.

**First,** given the general lack of financial literacy education provided by the schools, it is important for youth development professionals to incorporate age-appropriate financial management knowledge and skills into programs for youth and their parents. If parents increase their financial knowledge and if they are taught to effectively communicate this knowledge to their children, it is more likely that their children will develop into financially responsible adults as they grow older.

**Second,** parents need to know that preparing their children to be successful in the financial marketplace is ultimately their responsibility. Financial literacy education needs to be provided over an extended period of time with ample opportunities for reinforcement and support. The family environment is the optimal setting for this type of interaction. Because personal values and beliefs are integral to spending and saving decisions, parents should want to take an active role.

**Finally,** parents may need information and assistance to improve the effectiveness of communication with their children about money. This study suggests that parents felt that they were communicating with their children about money and financial issues, but the responses from the children did not reflect the same degree of communication. It may also be that simply talking about money does little to increase the financial knowledge of children. Providing parents with educational games and activities may lead to better outcomes.

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## References

Allen, M.W. (2008). Consumer finance and parent-child communication. In J.J. Xiao (Ed.), *Handbook of Consumer Finance Research* (pp. 351-361). New York, NY: Springer.

Allen, M.W., Edwards, R., & Hayhoe, C. (2007). Imagined interactions, family money management patterns and coalitions, and attitudes toward money and credit. *Journal of Family and Economic Issues, 28*, 3-22.

American Community Survey. (2007). *American Community Survey data sets*. Retrieved from http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS&_submenuId=&_lang=en&_ts=

Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1992). Exercise of personal agency through self-efficacy mechanism. In R. Schwarzer (Ed.), *Self-efficacy: Thought control of action*. Washington, DC: Hemisphere, 3-38.

Barnes, H., & Olson, D.H. (1985). Parent-adolescent communication. In D. Olson, H. McCubbin, H. Barnes, A. Larsen, M. Muxen, & M. Wilson (Eds.), *Family Inventories* (pp. 51-63). St. Paul, MN: Family Social Science, University of Minnesota.

Bernheim, B.D., Garrett, D.M., & Maki, D.M. (2001). Education and saving: The long-term effects of high school financial curriculum mandates. *Journal of Public Economics, 80*, 435-465.

Bernanke, B. (2008). The importance of economic education and financial literacy. *States News Service.* Retrieved on June 30, 2008 from http://global.factiva.com/ha/default.aspx

Bowen, C.F. (2002). Financial knowledge of teens and their parents. In J. Lown (Ed.), *Proceedings of the 2002 Annual Conference of the Association of Financial Counseling and Planning* (pp. 93-101). Scottsdale, AZ: Association of Financial Counseling and Planning.

Braunstein, S., & Welch, C. (2002). Financial literacy: An overview of practice, research, and Policy. *Federal Reserve Bulletin, 88*, 445-457.

Carlson, L., Grossbart, S., & Stuenkel, J.K. (1992). The role of parental socialization types on differential family communication patterns regarding consumption. *Journal of Consumer Psychology*, *1*(1), 31-52.

Clarke, M.C., Heaton, M.B., Israelsen, C.L., & Eggett, D.L. (2005). The acquisition of family financial roles and responsibilities. *Family and Consumer Sciences Research Journal, 33,* 321-340.

Flurry, L.A. (2007). Children's influence in family decision-making: Examining the impact of the changing American family. *Journal of Business Research, 60*, 322-330.

Greenspan, A. (2003). The importance of financial and economic education and literacy. *Social Education, 67(2).* Retrieved June 30, 2008 from http://global.factiva.com/ha/default.aspx

Jump$tart Coalition for Personal Financial Literacy. (2004). *Financial literacy improves among nation's high school students.* Retrieved on August 14, 2006 from http://www.jumpstart.org/fileuptemp/FINAL_PR_Jeump$tart_2--4_Survey.doc

Jump$tart Coalition for Personal Financial Literacy (2008). State financial education requirements. Retrieved on June 30, 2008 from http://www.jumpstart.org/state_legislation/index.cfm

Koerner, A.F., & Fitzpatrick, M.A. (2006). Family communication patterns theory: A social cognitive approach. In D.O. Braaithwaite & L.A. Baxter (Eds.), *Engaging theories in family communication: Multiple perspectives* (pp. 50-65). Newbury Park, CA; Sage.

Kourilsky, M., & Murray, T. (1981). The use of economic reasoning to increase satisfaction with family decision making. *Journal of Consumer Research, 8*(2), 183-188.

Lachance, M.J., Lagault, F., & Bujold, N. (2000). Family structure, parent-child communication, and adolescent participation in family consumer tasks and decisions. *Family and Consumer Sciences Research Journal*, *29*(2), 125-152.

Mandell, L. (2001). *Improving financial literacy: What schools and parents can and cannot do.* Washington, DC: Jump$tart Coalitions for Personal Financial Literacy.

Mimura, Y., Koonce, J., Mauldin, T.A., Rupured, M.A., & Jordan, J. (2008). Intergenerational transmission of savings behavior and family communication. Unpublished manuscript. Athens, GA: University of Georgia.

Moore, R.L., & Stephens, L.F. (1975). Some communication and demographic determinants of adolescent consumer learning. *Journal of Consumer Research, 2*, 80-92.

Moschis, G.P. (1978). *Acquisition of the consumer role by adolescents*. Atlanta, GA: Georgia State University.

Moschis, G.P. (1985). The role of family communication in consumer socialization of children and adolescents. *The Journal of Consumer Research, 11*(4), 898-913.

Moschis, G.P., & Churchill, G.A. (1978). Consumer socialization: A theoretical and empirical analysis. *Journal of Marketing Research, 15*, 599-609. *Adolescence, 24,* 711-723.

Multistate North Central Research Project 1013. (2007, August). *Survey Instrument: The Economic and Psychological Determinants of Household Savings Behavior.* Retrieved on June 10, 2008, from http://lgu.umd.edu/lgu_v2/homepages/attachs.cfm?trackID=3374

Pritchard, M.E., Myers, B.K., & Cassidy, D.J. (1989). Factors associated with adolescent saving and spending patterns.

Sherer, M., Maddux, J.E., Mercandante, B., Prentice-Dunn, S., Jacbos, B., & Rogers, R. W. (1982). The self-efficacy scale: Construction and validation. *Psychological Reports, 51*, 663-671.

U.S. Census. (2008). CH-1. Living Arrangements of Children Under 18 Years Old: 1960 to Present. Retrieved on June 30, 2008 from: http://www.census.gov/popultion/www/socdemoo/hh-fam.html

United States Department of the Treasury. (2009). *President's Advisory Council on Financial Literacy*. Retrieved on January 21, 2010, from http://www.ustreas.gov/offices/domestic-finance/financial-institution/fin-education/council/

Warneryd, K.E. (1988). On the psychology of savings: An essay on economic behavior. *Journal of Economic Psychology, 10*, 515-541.

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# Combating Youth Violence Through Anti-Violence Coalitions in Three West Virginia Counties

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# Combating Youth Violence Through Anti-Violence Coalitions in Three West Virginia Counties

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**Abstract:** Kids Win was funded by SAMHSA (Substance Abuse and Mental Health Services Administration) for Cabell, Mason and Wayne Counties in West Virginia. The goal of the project was to develop anti-violence coalitions in the three counties and to develop a strategic plan for a pilot program combating youth violence. The pilot program was designed to use the Second Step and Hazelden Anti-Bullying curricula at the three middle schools. Evaluation methods included a survey of teachers, a survey of students, and a comparison of results of a state mandated school discipline report. All three data sources support the conclusion that violence was reduced significantly because of the Kids Win Program. Kids Win has demonstrated what can be accomplished by teaching students the behavioral skills needed to resolve problems without escalating violence. This program merits replication and expansion and can serve as a model for other programs.

## Introduction

Many public health reports show that youth violence continues to be an ongoing and serious problem in communities across the country. The peak year of the youth violence epidemic in the United States was 1993, however, the percentage of youth engaged in violent behavior remains high today. One key to preventing a great deal of youth violence is, "understanding where and when it occurs, determining what causes it, and scientifically documenting which of many strategies for prevention and intervention are truly effective" (Surgeon General's Report on Youth Violence, 2009). An example of a youth program based around anti-violence coalitions in the communities involved is the Kids Win program which targeted youth in three counties in West Virginia.

A number of other studies have also been conducted on youth violence in similar geographic areas. One example is a study conducted in Pittsburgh, Pennsylvania, which examined the impact of optimistic bias on a school prevention program for middle and high school students. This theory based approach found that despite high profile school shootings, students maintained the belief that violence is less likely to happen to them or their school verse elsewhere in the country (Chapin, 2003). Another study examined different strategies available to schools to address concerns related to school violence. Results from this study recommend effective school violence prevention programs should require comprehensive planning. This comprehensive planning should include documented best-practice programs, preventive strategies, and effective responses to any violence that may occur (Peterson, Larson, and Skiba, 2001). Another example is a whole-school violence prevention program in Connecticut which used a university and public school collaboration. This program was built on elements currently known to support students to learn in a safe environment. This on-going study has recommendations including allowing time for new programs to be developed and placing importance on school-linked services for students (Haymes, 2003).

Youth violence has been an issue in West Virginia in recent years. In 2000, the teen violent death rate was 64.6 per 100,000 children in West Virginia counties combined (Folden, 2002). According to the 1999 Youth Risk Behavior Survey (YRBS) of the number of students living in West Virginia who carried a weapon such as a gun, knife, or club on at least one day during the thirty days prior to the survey was 21.5% as compared to 17.3% of the students in the United States. Additionally, 33.1% of the students living in West Virginia reported they were in a physical fight one or more times during the year prior to the survey (National Center for Chronic Disease Prevention and Health Promotion, 2009). However, in many counties in West Virginia, youth anti-violence activities have been limited and focused on a few individuals at the family level. Ten years ago, the Cabell County Youth Violence Steering Committee was formed to address youth violence issues. The focus for the Kids Win program discussed in this article evolved from this steering committee.

## History of Kids Win

Kids Win is a grant funded project which focused on youth violence prevention in three counties in West Virginia including Cabell, Mason, and Wayne counties. For these three West Virginia counties, Cabell County (population of 96,785) ranked 17, Wayne County (population of 42,903) ranked 28, and Mason County (population of 25,959) ranked 34 out of 55 counties for the teenage violence death rates (Folden, 2002; U.S. Census Bureau, 2009). The project was initiated in response to the Cabell County Youth Violence Steering Committee attempting to develop a three-county youth violence prevention coalition. The goal of the project was to develop anti-violence coalitions in each county and a strategic plan to combat youth violence. The Second Step Program (http://www.cfchildren.org/programs/ssp/overview/), a United States Department of Education Exemplary Program, and the Hazelden Anti-Bullying program (http://www.hazelden.org/web/public/publishing.page), were selected as best practice models. The program committee selected Middle Schools as pilot programs sites.

The project at each middle school included classroom teaching of the Second Step and Hazelden Anti-Bullying curricula by the school coordinators and classroom teachers. Second Step is designed to insert skills-based training into the existing school curricula and encourage the transfer of skills to behavior at school and at home. The curriculum consists of forty-five to fifty minute lessons per week with videos, role-plays and discussions supplementing reading and lecture materials. Second Step emphasizes developing empathy, anger management, improving communication and collaborative problem solving skills and conflict resolution skills.

Classroom instruction was supplemented with extracurricular activities such as a Violence Prevention Week, a three county media campaign, and school Youth Anti-Violence Councils. The

Youth Councils included peer mediators who were trained in peer mediation and conflict resolution, and an anti-bullying team that served to activate bystanders of bullying incidents to assist in diminishing the bullying problem at each school. In addition, students who were bullies and victims of bullying were referred to the school coordinators for counseling.

## Methodology

The evaluators used a triangulation approach in evaluating the results of the Kids Win Pilot Projects. This approach included using a teacher survey, a student survey, and state-mandated School Discipline Reports.

### *Kids Win Teacher Survey*

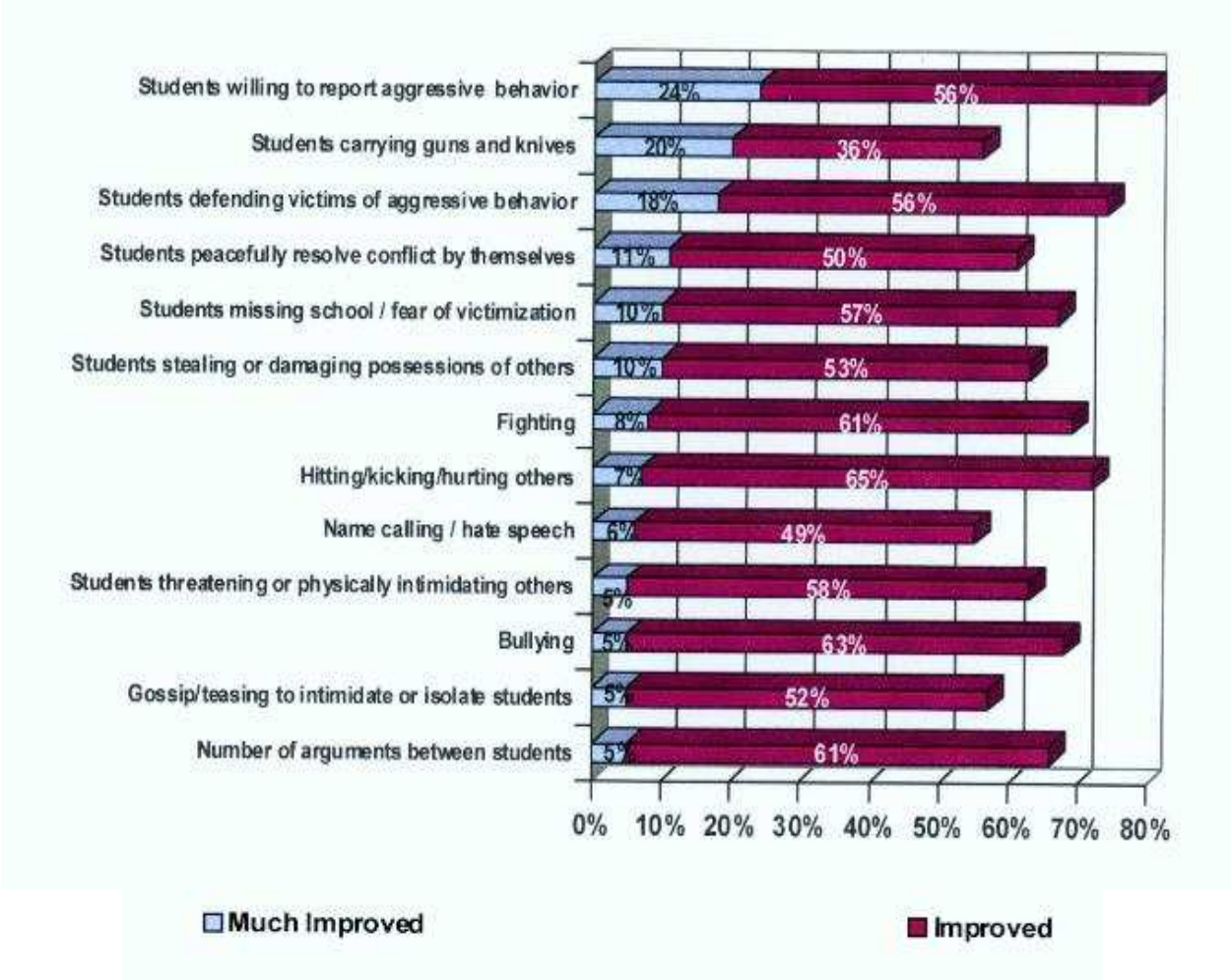
A survey of all teachers at each school was conducted to determine whether the teachers perceived any changes in violence at the school and which program components were most valuable in reducing violence. Eighty-seven teachers completed the survey. The survey was a two-part survey with the first section asking what changes had occurred in nine categories of violent acts (e.g. arguments, gossip and teasing, name-calling or hate speech, bullying, threats or intimidation, stealing or damaging possessions, hitting or kicking, fighting and carrying weapons) and in four more general categories of behavior relating to abilities to respond to violence (e.g. supporting victims of bullying; resolving conflicts peacefully; willingness to report aggressive or inappropriate behavior; and missing school because of fear or victimization). The second section of the survey asked teachers to rate the effectiveness of seven components of the Kids Win Program: the school coordinator, bullying prevention classes, referrals of bullies and aggressive students to the school coordinator, referrals of victimized students to the school coordinator, Violence Prevention Week, Youth Violence Prevention Council, Anti-Bullying Team, and Peer Mediators.

## Teacher Ratings of Changes Due to Kids Win Program

Fifty percent or more of the teachers reported an improvement in each category of reduced school violence. The greatest improvement was in the number of students who were willing to report aggressive behavior with 80 percent of teachers reporting improvement in this category. Over 70 percent of the teachers reported improvement in the number of students who defended victims of aggressive behavior. Additionally, over 70 percent of the teachers reported a reduction in the number of students who hit, kicked or otherwise physically hurt others. Reduced student fighting and stealing were reported by 69 percent of the teachers and in bullying by 68 percent.

**Figure 1**

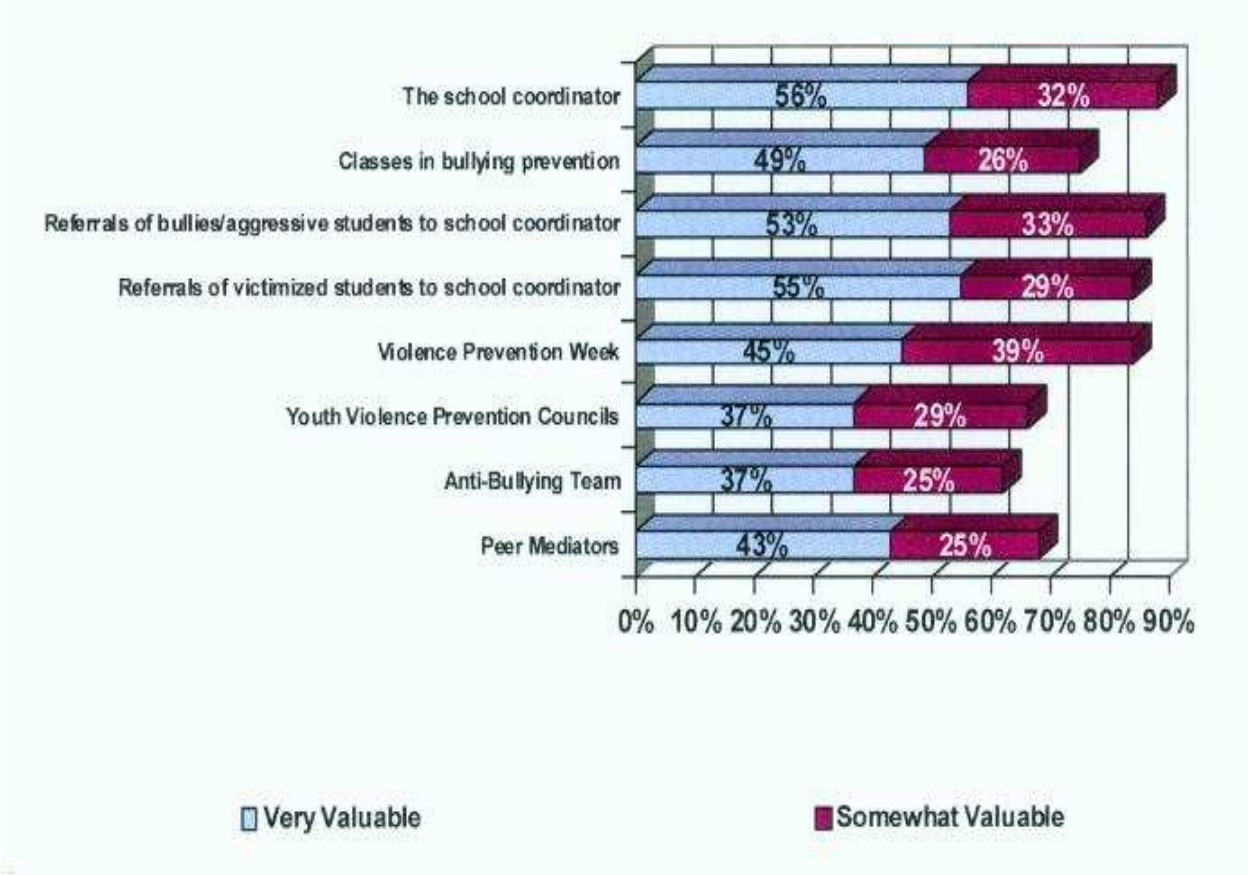
***Teacher Ratings of Changes Due to Kids Win Program (N=87)***




## Teacher Ratings of Kids Win School Program Components

The teachers were overwhelmingly positive in their evaluations of the impact of each aspect of the Kids Win program. Ratings of the program components ranged from 77 percent to 100 percent of the teachers considering them "very valuable" or "somewhat valuable." Teachers ranked having a Kids Win school coordinator (rated valuable by 88 percent) and being able to refer bullies (rated valuable by 86 percent) or to refer victims (rated valuable by 84 percent) to the school coordinator as the most valuable parts of the program. The peer mediators, anti-bullying teams and Youth Councils were considered valuable by over 60 percent of teachers.

**Figure 2**
***Teacher Ratings of Kids Win School Program Components (N=87)***




## Kids Win Student Survey

The Kids Win Student Survey was a single pretest – posttest evaluation design using matched pairs. The student surveys were administered at the beginning and at the conclusion of the 2002-2003 Kids Win Program to all students in each school. The outcome analysis was limited to students who completed a survey in both the Fall and Spring semesters. There were 605 students who had survey forms with matching code numbers from each semester without any missing data. Safeguards were used to ensure that individual student responses could not be identified and that confidentiality would be maintained.

A Violence Questionnaire was used to measure the amount of violent behavior engaged in by students, the extent of violence experienced by them (referred to as victimization), where violence occurred and their responses to the violence. The questionnaire also asked whether the students reported violence they experienced or saw, to whom they reported it and if unreported, their reasons for not reporting it (See Figure 3 below). The instrument included twenty items adapted from the *California School Climate and Safety Survey (CSCSS)* (Furlong, Casas, and Chung, 1996). A School Climate Survey was also adapted from the *Inviting Schools Safety Survey* (Shoffner and Vacc, 1999) to measure the students' perceptions and feelings about their schools. The questionnaire consisted of twenty-five questions and used a Lickert Scale to measure student's beliefs.

## Demographics

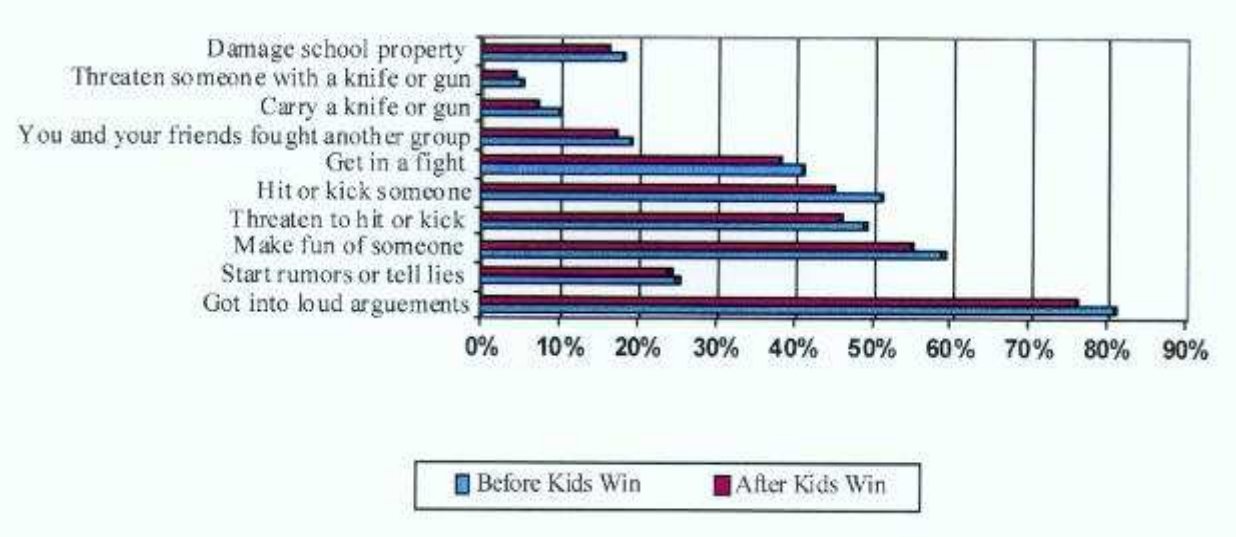
Some classes did not complete the surveys during both semesters and some grade levels did not participate at every school. There were 193 (32%) sixth graders, 223 (37%) seventh

graders and 189 (31%) eighth graders included in responding. Each grade level represented about one-third of the matched pairs and demographics of the matched pairs were similar to those of the entire group completing the sample.

### *Comparison of Violent Actions Before and After Kids Win*

The Total Violence Scores indicated that 322 (53%) students engaged in fewer violent acts after a year of participation in Kids Win. Fifty-eight (9%) of students had no change in their scores and 227 (38%) reported more violent acts in the Spring than in the Fall. The number of students engaging in fewer violent acts after Kids Win is statistically significant (Wilcoxon signed ranks test $p < .0001$). The Total Violence Scores could range from zero, that is no violent acts were committed, to the maximum score possible of forty, that is 7+ violent acts were committed in all ten categories. Before Kids Win, scores ranged from zero to forty, but after Kids Win the range was zero to twenty-nine, suggesting that the most violent students had decreased the frequency of their violent activities. The mean Total Violence Score dropped from 8.45 before Kids Win, to a mean of 7.4 after Kids Win ($p = .0001$). The evidence clearly shows that over half the students decreased their violent activities and the amount of decrease was greater than could be explained by chance. There was also a decrease in the percentage of students who engaged in each of the ten categories studied in this project. The following figure shows students who committed violent acts before and after Kids Win.

**Figure 3**
***Comparison of Percent of Students Engaging In Violent Acts Before and After Kids Win (N=605)***




There was consistency across the board in violence reduction. Physical violence declined in several of the areas. There was a 13 percent decrease in students who were in group fights when comparing the students who engaged in activities each semester. Additionally, 11 percent less were in individual fights and 12 percent fewer students hit, kicked or slapped others. Sixteen percent fewer students damaged school property after the program than before the program.

Sixteen percent fewer students carried a knife or gun after Kids Win. This is a particularly important change. In the fall, about a third of the students reported carrying a knife or gun. Many students did not bring them to school and only used them for hunting, fishing and other outdoor activities. This is an important part of the local culture and many families in rural areas rely on hunting and fishing for food; it is unlikely that students will stop these activities. Potential problems lie in the misuse of weapons. In the year before Kids Win, 5 percent of the students, who carried a weapon, went on to threaten others with it and 4 percent did so after

Kids Win began. In addition, 10 percent of students reported bringing weapons to school in the year before Kids Win and 7 percent of students did so after Kids Win had started.

### *School Climate Survey*

In reviewing at the School Climate results, the majority of students responded that they feel safe in their schools. However, the data does not indicate that the school climate became more positive after Kids Win. Student ratings of their schools changed very little from the fall to the spring survey. There was no clear across the board trend in ether a positive or negative direction where the change did occur. Although the present analysis focuses on the 605 matched pairs, it should be noted that the ratings by all students who completed the spring survey were slightly more positive than those of the matched pairs. Overall, ratings for positive aspects of the school climate improved for four factors and declined for seven factors. Responses to specific questions about perceived safety were mixed. Despite the fact that over 65 percent of students feel safe at school, over half report that that there are places at the school where students don't feel safe and about 40 percent reported some students are afraid to go to the bathroom. Bus safety was somewhat improved and over 60 percent felt safe there after Kids Win.

The five factors that students said were present most frequently were the same before and after Kids Win. These top five factors (see below) that students felt were "always" or "sometimes" present were there are after-school activities, everyone has a fair chance to participate, teachers care about students, I feel safe at school, and grown-ups at school help with problems.

| Factors | Percentage of Students in the Fall | Percentage of Students In the Spring |
|---|---|---|
| **Decline in aspects of school climate…..** | | |
| There are after school activities | 84% | 77% |
| Everyone has a fair chance to participate | 74% | 72% |
| Teachers care about students | 72% | 68% |
| I feel safe at school | 68% | 66% |
| Grown-ups at school help with problems | 67% | 65% |

In general, the negative factors did not change much either. The negative factors students most frequently reported being "always" or "sometimes" present were students start rumors/tell lies to make others feel bad, students are often bored, people make fun of students who were different, and teachers and principals yell at students a lot.

| Factors | Percentage of Students in the Fall | Percentage of Students In the Spring |
|---|---|---|
| Students start rumors/tell lies to make others feel bad | 78% | 76% |
| Students are often bored | 71% | 76% |
| People make fun of students who were different | 67% | 64% |
| Teachers and principals yell at students a lot | 63% | 64% |

### *School Discipline Report*

The school discipline report is a state-mandated annual report of the number of students committing various types of offenses. The offenses are documented for each school year and the school discipline records are maintained by the principal for each school and sent to the West Virginia Department of Education. These reports could provide for an excellent basis for a longitudinal comparison of the number of violent activities that occurred at each school as well

as a comparison of the current levels of violent activity reported by different schools. However, longitudinal comparisons are difficult because the State Department of Education changed a number of codes between the years and many schools do not record the data in the same way. Additionally, not every school records the data in exactly the same way even though the coding categories are the same.

## School Discipline Reports for the Pilot Schools

Violence was dramatically reduced at Pt. Pleasant Middle School during the 2002-03 school year. In an October 2003 interview, the principal for the previous five years, said, "We had a huge reduction in fighting last year. We used to average about 8 fights a month and in the last four months of last year we did not have any. This year we had our first fight of the year in mid-October." She added, "We think that it was because of the Kids Win program and the Character Class we added last year….The conflict resolution and anti-bullying were very effective…We did everything we could to keep as much of the program as possible this year."

Concerning Wayne Middle School, in an October 2003 interview with assistant principal in charge of discipline stated, "we had many fewer fights and less violence than last school year" (2002-03). He was certain that fighting and violence had declined and attributed it to the program stating "the peer mediation and conflict resolution really worked. You could see that the attitude of the kids really changed. In talking with them after they went through peer mediation, I could see that they had a change in attitude." He was extremely pleased with the impact of Kids Win and complimentary about the school coordinator.

The Cammack Middle School Discipline Report showed a reduction in most categories of violent offences. Physical violence decreased sharply in that physical assault on students decreased by 32 percent from seventy-four to fifty. There was also a decrease in physical assaults of school employees from nine to two incidents.

## Conclusions

To get an accurate picture of how the Kids Win Programs affected violence at the pilot schools, it was essential to include data from a number of sources. The student surveys were crucial because a great deal of violence and victimization is not reported or observed by adults. In addition, measuring the difference between the same student's responses in the Fall and in the Spring increased the accuracy of measuring how much change had taken place for each student. Nevertheless, middle school students' ability to reliably assess and report these facts is open to question and it was important to verify their impressions. Teachers are the adults most likely to hear about violence and to observe it; consequently their assessment was an important subjective measure to compare with students' self-reports. Finally, the School Discipline Reports provide a fairly standard metric that is used by all schools in the state. The School Discipline Report is a more objective measure that can be compared with data from the more subjective sources as well as to track changes longitudinally.

All three data sources support the conclusion that violence was reduced significantly because of the Kids Win Program. Looking at the changes in behavior of the individual students themselves, Kids Win clearly made an important difference. The reduction in violent acts reported by students is consistent with the impressions of teachers and the records of violent acts in the School Discipline Reports except that the teachers and School Discipline Reports show a greater reduction in violence than the students reported.

## Recommendations

Kids Win has demonstrated what can be accomplished by teaching students the behavioral skills needed to resolve problems without escalating violence. The Second Step Program (referred to as anti-bullying classes in the local schools) emphasized teaching communication skills and conflict resolution techniques within the context of bullying. Once students had learned an alternative to escalating the level of aggressiveness in conflict situations, they reduced the amount of physical violence that they engaged in. Even though the Second Step Program states that it will take three years to accomplish significant change, the Kids Win Programs were able to bring about important and statistically significant reductions in violence in only one year. The pilot programs have accomplished this in schools with relatively strictly mandated policies and curricula. They have accomplished this by targeting specific behaviors rather than by attempting to change the underlying climate of the school. It is particularly important that in Appalachia, where the local culture supports carrying weapons and fighting, Kids Win has been able to successfully teach an alternative approach. This program merits replication and expansion and can serve as a model for future programs.

## References


Chapin, J. (2003). Unrealistic Optimism and School Violence Prevention Programs. *North American Journal of Psychology* 2, 193-203.

Folden, P. (2002). West Virginia Kids Count Data Book: 2001 County Profiles of Child Well-Being. Trends in Child Well-Being, 1990 to 2000. *Kids Count*.

Furlong, M., Casas, M., Corral, C., & Chung, A. (1996). Drugs and School Violence. *Education & Treatment of Children*, 20, 263-281.

Haymes, E. (2003). Whole-school Violence Prevention Program: A University Public School Collaboration. *Children & Schools*, 25, 121-128.

Hazelden Publishing. (2009, September 23). Retrieved from http://www.hazelden.org/web/public/publishing.page

National Center for Chronic Disease Prevention and Health Promotion. Youth Risk Behavior Survey. (2009, November 12). Retrieved from http://apps.nccd.cdc.gov/yrbss/

Peterson, R., Larson, J., & Skiba R. (2001). School Violence Prevention: Current Status and Policy Recommendations. *Law & Policy*, 23, 345-372.

Second Step Program. (2009, October 10). Retrieved from http://www.cfchildren.org/programs/ssp/overview/

Shoffner, M., & Vacc, N. (1999). Psychometric Analysis of the Inviting School Safety Survey. *Measurement & Evaluation in Counseling and Development,* 32, 66-75.

Surgeon General's Report on Youth Violence. (2009, November 12). Retrieved from http://www.surgeongeneral.gov/library/youthviolence

United States Census Bureau. (2009, November 12). Retrieved from http://quickfacts.census.gov

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# The Influence of Past Experiences on the Motivation of Adult Volunteers

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# The Influence of Past Experiences on the Motivation of Adult Volunteers

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**Abstract:** From its' conception, 4-H has encouraged volunteerism and utilized volunteers to accomplish its' mission - to assist youth in acquiring knowledge, developing life skills, and forming attitudes that will enable them to become self-directing, productive and contributing members of society. The purpose of this study was to explore and describe the factors that motivated [state] 4-H camp volunteers to volunteer with 4-H youth. The Volunteer Functions Inventory was used as the theoretical base for this study. The Values construct (M=3.68) of the VFI was the highest motivating factor of adult 4-H volunteers. The Understanding construct (M=3.39) ranked the second highest motivational factor in volunteerism followed by Social construct (M=3.28), the Enhancement construct (M = 3.05) and the Protective construct (M=2.78). The Career construct (M=2.61) was the least motivating factor to adult volunteers. It was also found that participants that were not involved with 4-H as a youth volunteered more days per year than did participants who were former 4-H members.

## Introduction

4-H is a youth organization directed by the State Cooperative Extension Service with the mission to "empower youth to reach their full potential, working and learning in partnership with caring adults" (National 4-H Council, 2008, para. 1). Over 6.5 million members from ages 5 to 19 from all 50 states engage in hands-on experiences through a curriculum that focuses on learning through doing (National 4-H Council, 2008). This applied approach to learning is implemented through tools such as volunteerism, community service, and service-learning which provide meaningful and educational experiences to fully engage youth (Safrit & Auck, 2003). Through these experiences, 4-H members have the opportunity to acquire the developmental needs of "belonging, mastery, independence, and service" (Iowa State University Extension, 2008, p. 1) along with life skills, which are foundational to youth growing into productive citizens (National 4-H Headquarters, 1999).

From its inception over 100 years ago, 4-H has engaged and relied upon volunteers to accomplish its mission (4-H Foundation, 2007). Nationally, nearly 440,000 volunteers act as the nuts-and-bolts, behind-the-scenes people who are essential to the success of 4-H clubs across

the country (National 4-H Headquarters, 2007). Without the help of these volunteers, 4-H could not fulfill its mission.

The vision of National 4-H is to "connect young people with caring adults leading to positive outcomes for youth" (National 4-H Headquarters, 2007, p.3). It would benefit Cooperative Extension personnel to pinpoint specific individual characteristics that good volunteers possess and use that information to recruit outstanding adult volunteers. Extension Agents may not know which avenues to pursue when seeking willing and qualified volunteers. By identifying characteristics of volunteerism, Extension Agents may learn how to focus their search for volunteers.

One characteristic of volunteers is previous involvement with youth organizations as a youth. A number of studies have been conducted to determine if participation in 4-H as youth effect member's volunteerism tendencies as adults (Ladewig & Thomas, 1987; Maass, Wilken, Jordan, Culen, & Place, 2006; Pennington & Edwards, 2006). Ladewig & Thomas (1987) compared volunteerism among 710 former 4-H members, 743 members of other organizations, and 309 nonparticipants in youth organizations. Results from adults in volunteer roles at community events and organizations were limited; though, 4-H alumni tended to be more involved in community activities than members of other youth organizations. Also, 4-H alumni were more likely to involve their children in the 4-H program and possibly become adult leaders themselves. In terms of adult community involvement, the oldest and most educated 4-H'ers were the most active in community activities as well as Cooperative Extension.

Mass, Wilken, Jordan, Culen, & Place (2006) surveyed 223 Oklahoma 4-H alumni to determine how they attribute their life skills to membership in 4-H and other youth development organizations. 4-H Alumni reported "Community Service Volunteering" as the second highest life skill that they attributed to 4-H and 45% of the respondents presently volunteer with 4-H.

Research conducted by Pennington and Edwards (2006) also compared 4-H with other youth development organizations and addressed two specific questions – (1) Does 4-H make an impact on the civic engagement of adults? (2) Do former 4-H members view the impact as being greater than that of other programming? The study was based on a population sample of 356 former Oklahoma 4-H Key Club members. Ninety-five percent of the sample served as volunteers. More than half volunteered 11 or more hours each month.

Individuals serve as 4-H adult volunteers for many reasons, but a major driving force behind 4-H volunteerism is that adult volunteers view the 4-H club as a credible, worthwhile, useful, and beneficial organization through which they enjoy making a difference in the lives of youth and receive satisfaction by helping others and becoming a part of the 4-H family (White & Arnold, 2003; Culp, 1997).

## Theoretical/Conceptual Framework

The theoretical framework is framed within the Volunteer Functions Inventory (VFI) that is based on research conducted by Clary (1998), who approached volunteerism from a motivational perspective. Clary developed a motivational analysis which strives to understand "the processes that move people to action – the process that initiate, direct, and sustain action." In order to answer these questions Clary adopted the functional analysis approach to motivation which is "concerned with the reasons and the purposes, the plans and the goals, that underlie and generate psychological phenomena – that is, the personal and social functions being served by an individual's thoughts, feelings, and actions" (Clary, et al., 1998, p. 1517).

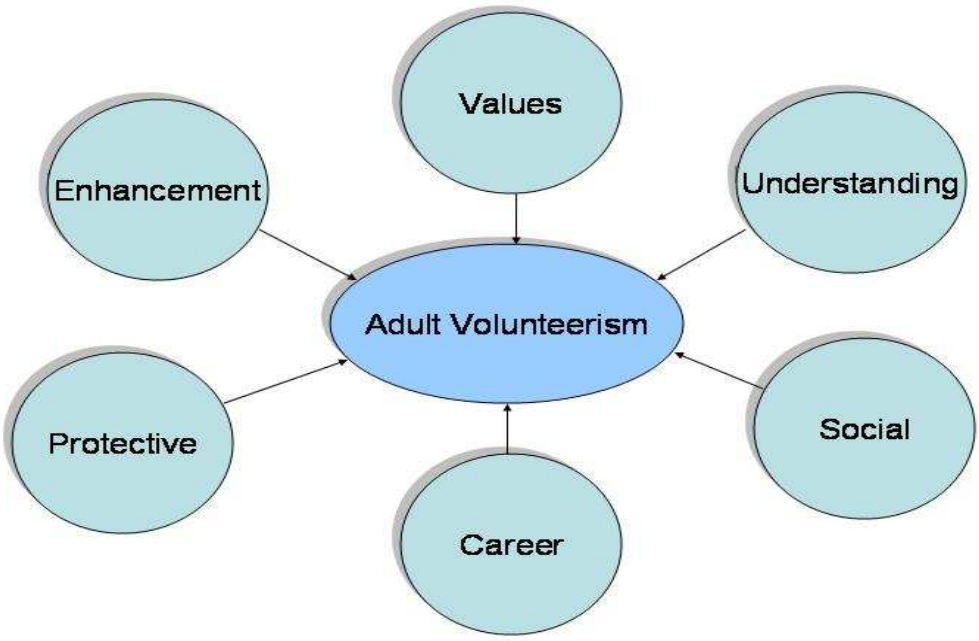
Through the use of functional analysis Clary sought to determine the specific motivations that volunteers fulfill while participating in community service activities. By analyzing the

motivations that are fulfilled by participation in volunteer service, six motivational functions served by volunteering were identified: (Clary, et al., 1998) (See Figure 1).

1. Values: express values and beliefs related to unselfish humanitarian desire to help others;
2. Understanding: involvement in activities to satisfy a desire to learn;
3. Social: opportunity to be with one's friends and to engage in favored activities;
4. Career: obtain potential career-related benefits;
5. Protective: escape from negative qualities or feelings related to ego; and
6. Enhancement: enhancing an individual's self-esteem and ego.

## Figure 1

Volunteer Functions Inventory Model (authors' interpretation based on Clary, et. al., 1998. Understanding and assessing the motivations of volunteers: a functional approach. *Journal of Personality and Social Psychology*, *74*(6).)




Clary, et al., (1998) concluded that the core propositions of a functional analysis of volunteerism are that acts of volunteerism that appear to be quite similar on the surface may reflect markedly different underlying motivational processes. The functions served by volunteerism manifest themselves in the unfolding dynamics of this form of helpfulness, influencing critical events associated with the initiation and maintenance of voluntary helping behavior.

## Purpose and Objectives

What factors motivate individuals who volunteer their time and talents to 4-H youth camp programs? Are adults motivated to volunteer because of past experiences with 4-H? How do adult volunteer demographics compare to 4-H volunteers in previous research? How does each of the six VFI constructs play a part in volunteerism among adults? This study sought to answer the aforementioned questions.

The purpose of this study was to explore and describe the factors that motivated 4-H camp volunteers to volunteer with 4-H youth. Within this study the following research objectives were addressed:

1. Describe the participants based on demographic characteristics;
2. Determine the motivational characteristics of the volunteers based on the Volunteer Functions Inventory: Values, Understanding, Social, Career, Protective, and Enhancement (Clary, et al., 1998); and
3. Using selected variables, determine if differences exist between volunteers that participated in 4-H as a youth and those that did not.

## Methods and Procedures

The research method employed in this study was a survey, used to explore and describe the factors that motivate adults to volunteer with 4-H youth (Ary, Jacobs & Razavieh, 2002; Miller, 2006). The population studied was a convenience sample of accessible 4-H adult volunteers at 4-H Summer Camp in 2008. There were no attempts to generalize with this sample. Previous research has effectively used convenience samples for research (Culp & Schwartz, 1998; Williams, Fraze, Burris, Akers, & Green, 2008; Smith, Park, & Sutton, 2007; Jennings, Brashears, Burris, Davis, & Brashears, 2007; Kitchel, Jenkins, & Robinson, 2007).

Questionnaires were delivered to Camp Managers at each camp who distributed them to adult volunteers at 4-H camps and asked the volunteers to complete and return them during their week at camp. Of the approximately 300 adult volunteers at the camps, 81 returned their questionnaire, providing a response rate of 27%. Because a non-random sampling method was used and no control for non-response could be implemented, the findings of this study cannot be generalized beyond the participants. However, the findings from this study are beneficial as they provide a baseline of information about adult volunteers which may be used for comparison purposes with future studies.

The instrument used consisted of researcher developed demographic questions (age, gender, ethnicity, marital status, education completed, employments status, occupation and previous youth organization participation) and the Volunteer Functions Inventory (Clary, Snyder, Ridge, Copeland, Stukas, & Haugen, 1998) which consisted of 30 questions measuring six motivation constructs: Protective, Values, Career, Social, Understanding, and Enhancement. Each question used a Likert-type scale that ranged between 1 and 4 (1 = Strongly Disagree and 4 = Strongly Agree). The VFI was designed to measure the motivations of currently active volunteers, and was supported by existing research (Bradford & Israel, 2008; Clary, Snyder, Ridge, Copeland, Stukas, Haugen, & Miene, 1998; Clary & Snyder, 1999; Esmond & Dunlop, 2004; Fletcher & Major, 2004; Okun, Barr, & Herzog, 1998). Validity and reliability of the VFI was previously established by the developers and was measured in this study (see Table 1). Face validity of the current instrument was established by a panel of experts.

**Table 1**

*Cronbach's Alpha for VFI*

| | Current Study | Clary et al. (1998) |
|---|---|---|
| Values | 0.81 | 0.80 |
| Understanding | 0.85 | 0.81 |
| Social | 0.78 | 0.83 |
| Enhancement | 0.89 | 0.84 |
| Protective | 0.86 | 0.81 |
| Career | 0.90 | 0.89 |

Data was analyzed using SPSS 16.0. Frequencies and percentages were calculated for the purpose of analysis and interpretation of nominal data. Means and standard deviations were used to analyze and interpret interval data, and t-tests were computed to analyze means between groups (Miller, 1998).

## Findings

Objective one sought to describe the demographic characteristics of the 4-H volunteers. The age range of the adult volunteers was between 22 and 69, with an average age of 44.5. Respondents volunteered between one and 300 days annually, with an average of approximately 51 days volunteered annually (Table 2).

### Table 2

*Participant Demographics*

| | Min | Max | Mean | Std. Deviation |
|---|---|---|---|---|
| Number of children (*n*=66) | 0 | 8 | 2.28 | 1.18 |
| Age (*n*=80) | 22 | 69 | 44.58 | 10.74 |
| Number of days volunteered (*n*=73) | 1 | 300 | 51.88 | 55.10 |

Approximately sixty percent of the respondents were female, 83% were Caucasian, 20% had at least a bachelor's degree, and 79% were employed full time (Table 3).

### Table 3

*Adult Volunteer Demographics*

| | | Frequency | Percent |
|---|---|---|---|
| Gender (*n*=81) | | | |
| | Female | 49 | 60.5% |
| | Male | 32 | 39.5% |
| Ethnicity (*n*=62) | | | |
| | Caucasian | 52 | 83.9% |
| | Black | 7 | 11.3% |
| | Other | 2 | 3.2% |
| | Native American | 1 | 1.6% |
| Education (*n*=81) | | | |
| | High School | 11 | 13.6% |
| | Some College | 24 | 29.6% |
| | Associates Degree | 5 | 6.2% |
| | Bachelors Degree | 16 | 19.8% |
| | Masters Degree | 22 | 27.2% |
| | Doctorate | 3 | 3.7% |
| Employment Status (*n*=81)<br>(Some respondents were a combination of the following) | | | |
| | Student | 5 | 5.6% |
| | Part-Time | 4 | 4.9% |
| | Full-Time | 64 | 79.0% |
| | Retired | 13 | 16.0% |
| | Unemployed | 2 | 2.5% |
| Marital Status (*n*=81) | | | |
| | Never Married | 11 | 13.6% |
| | Married | 59 | 72.8% |
| | Widowed | 2 | 2.5% |
| | Divorced | 9 | 11.1% |
| | Separated | 0 | 0% |

Data analysis revealed that 58% of the respondents participated in 4-H as youth and of those past members 52% were involved with 4-H volunteer service activities. When asked if they attributed their present volunteer participation to their past 4-H volunteer service experiences, 94% agreed that past service experiences were influential in their decision to be a volunteer (Table 4).

**Table 4**

*Adult Volunteer Past Experiences*

| | | Frequency | Percent |
|---|---|---|---|
| Were you a 4-H member as a youth? (*n*=81) | | | |
| | Yes | 47 | 58.0% |
| | No | 34 | 42.0% |
| | | | |
| Did you participate in any 4-H volunteer service activities as a youth? (*n*=47) | | | |
| | Yes | 41 | 51.9% |
| | No | 6 | 48.1% |
| | | | |
| Do you attribute your present volunteer participation to your past 4-H volunteer service experiences? (*n*=41) | | | |
| | Yes | 38 | 93.7% |
| | No | 3 | 7.3% |

Variables measured included number of days volunteered annually along with the six dimensions of Volunteer Functions Inventory (VFI) to determine volunteer motivation of participants. An independent samples t-test was used with selected variables to determine if differences existed between participants that had been members of 4-H as a youth and those that had not. When number of days volunteered were compared between those two, a significant difference was found, with non-4-H members volunteering more days per year than participants who were previously 4-H members. VFI constructs were also compared with no significant differences found between these two groups.

**Table 5**

*t-tests for 4-H & Non-4-H Members*

| | All Participants | | 4-H Member | | Non-4-H Member | | Significance |
|---|---|---|---|---|---|---|---|
| | *n* | *M* | *n* | *M* | *n* | *M* | |
| Number of days volunteered | 73 | 51.9 | 43 | 37.07 | 30 | 73.10 | 0.005 |
| VFI Protective | 78 | 2.783 | 47 | 2.80 | 31 | 2.70 | .504 |
| VFI Values | 81 | 3.682 | 47 | 3.68 | 34 | 3.66 | .828 |
| VFI Career | 79 | 2.613 | 47 | 2.83 | 32 | 2.5 | .093 |
| VFI Social | 81 | 3.276 | 47 | 3.23 | 34 | 3.28 | .634 |
| VFI Understanding | 81 | 3.394 | 47 | 3.36 | 34 | 3.42 | .522 |
| VFI Enhancement | 81 | 3.046 | 47 | 3.09 | 34 | 2.98 | .392 |

*Note.* The VFI scale: 1=strongly disagree; 4=strongly agree.

In addition to volunteer 4-H participation as youth, participants were asked if their children were 4-H members. Approximately 80% of the respondents stated that their children had been involved in a 4-H club (Table 6).

## Table 6

*Adult Volunteer's Children 4-H Involvement*

| | | Frequency | Percent |
|---|---|---|---|
| Have your children been involved in the 4-H Club? (*n* = 69) | | | |
| | Yes | 55 | 79.7% |
| | No | 14 | 20.3% |

## Conclusion

Based on the study findings, numerous factors lead adults to volunteer with 4-H youth. The findings from this study support research by Ladewig and Thomas (1987), Maass, Wilken, Jordan, Culen, and Place (2006), and Pennington and Edwards (2006), which found that 4-H alumni attributed their present community involvement to life skills learned through 4-H. The researchers found that the adult participants in this study volunteered an average of 51.88 days per year. When participants were grouped as having past 4-H membership significant differences appeared with Days Volunteered ($p = 0.005$). Sadly, 4-H alumnus ($M = 37.07$) volunteered fewer days on average than non-4-H members ($M = 73.10$).

The average age of adult volunteers at 4-H summer camps was 44.58 years old with the minimum age being 22, maximum age being 69. These findings are consistent with those of Culp, McKee, and Nestor (2005) who found through a national study an average volunteer age of 46.33. Of 81 respondents, 49 (60.5%) were female, 32 (39.5%) were male. Volunteer gender results in this study may be effected by adult volunteer cabin assignments during summer camp, as regulations require there must be at least one adult per cabin aligning with gender.

Sixty-two respondents described their ethnicity to be: 52 (83.9%) Caucasian, 7 (11.3%) Black, 2 (3.2%) Other, and 1 (1.6%) Native American. Fifty-nine (72.8%) were married, 11 (13.6%) were never married, 9 (11.1%) were divorced, and 2 (2.5%) were widowed. These findings are similar to those of Culp (1996) who found that 7.89% of 4-H volunteer leaders were single while 87.25% were married.

Psychologists view community service through volunteerism "as an example of behavior that reflects a high level of human development" (Smith, 2005, paragraph 1). This study asked respondents their educational status: High School 11 (13.6%), some college 24 (29.6%), Associates degree 5 (6.2%), Bachelors degree 16 (19.8%), Masters degree 22 (27.2%), and Doctorate 3 (3.7%). It seems that 4-H clubs may attract volunteers that have pursued higher education. Compared with the results from Culp, McKee, and Nestor (2005) respondents' educational level were as follows: Some high school (1.4%), high school graduate (30.4%), Certification (22.9%), Bachelor's degree (30.0%), Master's degree (13.8%), and Doctorate (1.6%).

Culp, McKee, and Nestor (2005) found that 68.22% of respondents have some form of education beyond high school level. Culp's statistic is similar, but smaller than the findings of this study which found that 86.5% of respondents pursued education beyond high school. Likewise, results of the 2005 study found that 45.4% of respondents earned a Bachelor's degree or higher, while this study found a higher percentage of respondents 50.7% earning a Bachelor's degree or higher.

Many different individuals with unique situations are drawn to volunteering with 4-H youth. 4-H Agents should not withhold from asking individuals to volunteer who work full-time, thinking they are too busy to volunteer. "The busier people's lives are the more likely they are to volunteer, be that through their workplace, church, community or children's school" (RTI International, 2006, paragraph 7). Findings from this study support the previous quote saying that busy people are more likely to volunteer than not. Seventy-nine percent of volunteers questioned worked full-time, while only 4.9% worked part-time; 16% were retired, 5.6% were students, and 2.5% were unemployed.

Adult volunteers sacrifice many hours to supervise and coach 4-H youth, so it is no surprise that the Values construct ($M = 3.68$) was the highest motivating factor of adult 4-H volunteers. As previously stated, 42 respondents had been involved in 4-H as youth. It appears that 4-H alumni who volunteer at 4-H events understand the impressions the club has left on their lives, and in turn volunteer to enable today's youth to gain the same benefits.

4-H's slogan is "Learn by doing," which provides the impetus for many 4-H events to have classes and learning opportunities incorporated into the schedule. While volunteering on behalf of others, many adults gain knowledge through instructional courses taught at 4-H events, which may explain why the Understanding construct ($M = 3.39$) ranks as the second highest motivational factor in volunteerism.

In order for 4-H functions to take place, volunteers must be present. Those adult volunteers who serve county 4-H programs continuously over a period of time meet new people and form a network of friends throughout the county, district, and state, and look forward to meeting with their friends at 4-H events. It appears that 4-H functions are just as much of a social event for adults as they are for the children, as the third highest motivating factor for adult volunteers is the Social construct ($M = 3.28$).

The Enhancement construct ($M = 3.05$) ranked as the fourth highest motivational factor. Individuals who contribute their time and energy to humanitarian causes gain a sense of dependability and feel good about themselves. Individuals who volunteer time after time surely feel a sense of self gratification that influences them to continue volunteering.

The Protective construct ($M = 2.78$) which ranked fifth, relates to the Enhancement construct. Many adults live and work in a stressful, intimidating, and demoralizing environment, therefore 4-H provides an outlet or escape for those individuals. Feeling of self-satisfaction that individuals gain from volunteering aides in the enlightening of the spirit and the healing of a broken ego.

Lastly, the Career construct ($M = 2.61$) was the least motivating factor to adult volunteers. If the Values construct was ranked first, then it would make sense that the Career construct would be ranked low. Individuals may not be thinking about benefiting their careers if they were volunteering for charitable reasons.

This study sought to determine if youth activities from youth and college influence adults to volunteer, as recommended by Culp (1996) who found that adult volunteers who participate in 4-H do so primarily due to previous 4-H membership. The results of this analysis revealed that 42 (52.5%) respondents did participate in 4-H as youth.

By using Clary's Volunteer Functions Inventory (VFI) it was revealed that participants volunteered at 4-H Summer Camps in 2008 predominantly due to the Values, Understanding, and Social constructs. It appears that 4-H alumni as well as non-4-H'ers understand the benefits and potential life changing opportunities available through the 4-H club and in turn volunteer to enable today's youth to experience those opportunities and to gain those benefits.

Volunteering allowed participants to develop a new network of friends and may act as a temporary escape from day-to-day activities. These motivational functions seem to have strong influences on adult volunteerism at 4-H Summer Camps. Participants were more likely to become involved as 4-H volunteers due to previous 4-H membership and their own children's involvement.

## Recommendations and Implications

The practical implications of this study are as follows:

- 4-H activities and curriculum positively influence youth and have lasting impacts throughout adulthood
- 4-H administrators should discover which motivational constructs volunteers seek and create volunteer experiences to meet those needs.

4-H administrators should:

- Recruit 4-H alumni as volunteers
- Recruit retired individuals to volunteer
- Recruit 4-H members' parents to volunteer
- Not be discouraged to ask full-time employees to volunteer
- Make sure that 4-H events are educational not only for the 4-H'ers but also for the volunteers
- Understand that 4-H functions are a social event for both 4-H'ers and volunteers
- Understand that 4-H functions act as an escape from home and work environments
- Understand that individuals volunteer based on a strong humanitarian desire to help others

Future studies need to be conducted to either confirm or refute the findings that 4-H alumnus do not volunteer as many days on average as do non-4-Hers. If other studies do indeed discover that 4-H alumnus volunteer more than non-4-Hers, this information could be used by state 4-H administrators to promote 4-H clubs and used to provide evidence for continued state and local funding.

## References

4-H Foundation. (2007). *Clover Cornerstone*. Retrieved March 20, 2009 from: http://www.[State]4h.org/public/more/foundation/Newsletters/Dec%202007%20newsletter.pdf

Ary, D., Jacobs, L.C., & Razavieh, A. (2002). *Introduction to research in education*. Belmont: Wadsworth/Thomson Learning.

Asthroth, K.A., & Haynes, G.W. (2002). More than cows and cooking: Newest research shows the impact of 4-H. *Journal of Extension, 40(6).* Retrieved May 14, 2008 from: http://www.joe.org/joe/2002august/a6.shtml

Boyd, B.L., Herring, D.R., & Briers, G.E. (1992). Developing life skills in youth. *Journal of Extension*, *30(4)*. Retrieved July 16, 2008 from: http://www.joe.org/joe/1992winter/a4.html

Bradford, B.M., & Israel, G.D. (2008). *Evaluating volunteer motivation for sea turtle Conservation in Florida*. University of Florida Extension. Retrieved August 16, 2008 from: http://edis.ifas.ufl.edu/WC053

Clary, E.G., & Snyder, M. (1999). The motivations to volunteer: theoretical and practical considerations. *A Journal of the Association for Psychological Science*, *8(5)*.

Clary, E.G., Snyder, M., Ridge, R.D., Copeland, J., Stukas, A.A., Haugen, J., & Miene,P. (1998). Understanding and assessing the motivations of volunteers: a functional approach. *Journal of Personality and Social Psychology*, *74(6)*. Retrieved July 16, 2008 from: http://comm2.fsu.edu/grad/phillips/functionalapproachtovolunteermotivation.pdf

Culp, K. (1996). Identifying continuing and non-continuing adult 4-H volunteers: how have they evolved over time? *Journal of Agricultural Education, 37(4).* Retrieved November 18, 2008 from: http://pubs.aged.tamu.edu/jae/pdf/vol37/37-04-44.pdf

Culp, K. (1997). Motivating and retaining adult volunteer 4-H leaders. *Journal of Agricultural Education, 38(2).* Retrieved November 18, 2008 from: http://pubs.aged.tamu.edu/jae/pdf/vol38/38-02-01.pdf

Culp, K., & Schwartz, V.J. (1998). Recognizing adult volunteer 4-H leaders. *Journal of Extension, 36(2)*. Retrieved September 28, 2008 from: http://www.joe.org/joe/1998april/rb3.html

Culp, K., McKee, R.K., & Nestor, P. (2005). Demographic differences of 4-H volunteers, agents, and state volunteerism specialists: implications for volunteer administration. *Journal of Extension*, *43(4)*. Retrieved November 13, 2008 from: http://www.joe.org/joe/2005august/a2.shtml

Culp, K., McKee, R.K., & Nestor, P. (2007). Identifying volunteer core competencies: regional differences. *Journal of Extension*, *45(6)*. Retrieved July 23, 2008 from: http://www.joe.org/joe/2007december/a3.shtml

Esmond, J.E., & Dunlop, P. (2004). *Developing the volunteer motivation inventory to assess the Underlying motivational drives of volunteers in western Australia*. Community Link and Network Inc. Retrieved August 16, 2008 from: http://www.morevolunteers.com/resources/MotivationFinalReport.pdf

Fletcher, T.D., & Major, D.A. (2004). Medical students' motivations to volunteer: an examination of the nature of gender differences. *Sex Roles*, *51(1/2)*. Retrieved August 11, 2008 from: http://findarticles.com/p/articles/mi_m2294/is_1-2_51/ai_n6142611

Iowa State University Extension. (2008). *The habits of remarkable 4-H youth development programs.* Retrieved August 7, 2008 from: http://www.national4-hheadquarters.gov/library/habits.pdf

Jennings, M., Brashears, M.T., Burris, S., Davis, C.S., & Brashears, M.M. (2007). A National Needs Assessment of Beef Cattle Producer's Knowledge and Attitudes Toward Pre-Harvest Food Safety Interventions. Proceedings of the National Agricultural Education Research Conference, May 16-18, Minneapolis, MN.

Kitchel, T., Jenkins III, C.C., & Robinson, J.S. (2007). College of agriculture course evaluation patterns. *NACTA Journal, 51*(4), 23-30.

Ladewig, H., & Thomas, J.K. (1987). Assessing the impact of 4-H on former members. *Education Resources Information Center*. Retrieved August 8, 2008 from: http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/ 30/4d/55.pdf

Maass, S.E., Wilken, C.S., Jordan, J., Culen, G., & Place, N. (2006). A comparison of 4-H and other youth development organizations in the development of life skills. *Journal of Extension*, *44(5)*. Retrieved July 20, 2008 from http://www.joe.org/joe/2006october/rb2.shtml

Miller, L.E. (1998). Appropriate analysis. *Journal of Agricultural Education, 39(2).* Retrieved January 16, 2009 from: http://pubs.aged.tamu.edu/jae//pdf/vol39/39-02-01.pdf

Miller, L.E. (2006). A philosophical framework for agricultural education research. *Journal of Agricultural Education, 47*(2), 106-117.

National 4-H Council. (2008). *4-H youth development: an overview*. Retrieved August 18, 2008 from: http://www.fourhcouncil.edu/pv_obj_cache/pv_obj_id_67DEE17C0C72A37211E30C35209E08E396F50000

National 4-H Headquarters. (1999). 4-H Programs Mission is Youth Development. Retrieved July 23, 2008 from: http://www.national4-hheadquarters.gov/library/habits.pdf

National 4-H Headquarters. (2007). *2005 4-H youth development statistics*. Retrieved July 23, 2008 from: http://www.national4-hheadquarters.gov/library/2005_ES-237_stats_6-06.pdf

Okun, M.A., Barr, A., & Herzog, A.R. (1998). Motivation to volunteer by older adults: A test of competing measurement models. *Psychology and Aging, 13(4)*. Retrieved August 16, 2008 from: http://web.ebscohost.com/ehost/pdf?vid=9&hid=9&sid=ead4cd1a-0b68-4041-b2ba-3c4bf471f026%40SRCSM1

Patton, M.Q. (1990). Editor's introduction. *Journal of Extension*, *28(3)*. Retrieved July 14, 2008 from: http://www.joe.org/joe/1990fall/ed1.html

Pennington, P., & Edwards, C. (2006). Former 4-H key club members' perceptions of the impact of "giving" life skills preparation of their civic engagement. *Journal of Extension*, *44(1)*. Retrieved June 29, 2008 from: http://www.joe.org/joe/2006february/a7.shtml

Riley, M.J., Schott, G., & Schultinik, J. (2001). *Determining volunteer motivations – a key to success*. Michigan State University Extension Retrieved August 11, 2008 from: http://web1.msue.msu.edu/aoe/volunteerism/Volmotivations.htm

RTI International. (2006). *Women more likely than men to volunteer*. Retrieved February 12, 2009 from: http://www.rti.org/news.cfm?nav=268&objectid=429C1F1D-0B08-428E-A69F74EEB74EA1DB

Safrit, R.D., & Auck, A.W. (2003). Volunteerism, community service, and service learning by Ohio 4-H'ers in grades 4-12. *Journal of Extension*, *41(4)*. Retrieved June 8, 2008 from: http://www.joe.org/joe/2003august/rb6.shtml

Smith, E., Park, T., & Sutton, M. (2007). Effect of Location and Education on Perceptions and Knowledge about Agriculture. Paper presented at the American Association of Agricultural Education Research Conference, Minneapolis, Minnesota.

Smith, T.J. (2005). Ethnic and gender differences in community service participation among working adults. *Journal of Extension 43(2)*. Retrieved February 12, 2009 from: http://www.joe.org/joe/2005april/rb1.php

Wessel, T. & Wessel, M. (1982). *4-H: An American idea 1900-1980*. Washington, D.C.: National 4-H Council.

White, D.J., & Arnold, M.E. (2003). Why they come, why they go, and why they stay: Factors affecting volunteerism in 4-H programs. *Journal of Extension, 41(4)*. Retrieved June 12, 2008 from: http://www.joe.org/joe/2003august/rb5.shtml

Williams, K., Fraze, S., Burris, S., Akers, C., & Green, C. (2008). External Factors Influencing Choice of Academic Major: A Comparison of Agricultural and Non-Agricultural Students. Paper presented at the American Association of Agricultural Education Research Conference, Reno, NV.

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# Perceptions of Empowerment of Participants within Youth Development Programs

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# Perceptions of Empowerment of Participants within Youth Development Programs

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**Abstract:** Highlighted in this paper is a study designed to investigate perceptions of empowerment among young 4-H club members. Participants included 90 boys and girls (mean age 10.61). Perceptions of the autonomy supportive nature of 4-H leaders and the general climate of 4-H clubs were assessed. MANCOVA analyses revealed participants perceived 4-H leaders and the general climate to be empowering. Although the young participants in this study confirmed some of the positive views found elsewhere in the literature, considerable disparities in their responses to various surveys were noted. There appeared to be uncertainty or misunderstanding among youngsters when asked to respond to questions about these concepts. The need for more useful quantitative measures of programmatic impact was accentuated.

## Introduction

4-H programs began in the late 1800's in order to meet the needs for a better agricultural education among the youth (History of 4-H, 2007). Most of these programs were started and continue outside of schools. In the early 1900's, 4-H clubs partnered with land-grant institutions of higher education and what is now the United States Department of Agriculture. In the early 1900's, the United States Department of Agriculture allowed for the creation of boys and girls clubs, which became 4-H. Starting in the 1960's, efforts and resources that had been devoted more heavily toward agricultural and home economic topics were being moved to programs that emphasize science, technology, and healthy living (History of 4-H, 2007).

The mission statement of 4-H now emphasizes empowering youth, working in partnerships with caring adults and reflects the focus of positive youth development. Adolescents are allowed to make contributions and recognize their own worth as leaders and the community is strengthened by this partnership. As Cindy Ballard of the National 4-H Council notes, "…if they're not given those leadership roles, they'll seek them elsewhere, even if that means in gangs" (p. 124 of Jueds, 1994). She also asserts that, "Gangs have just done a much better job of meeting [children's] needs than society has" (p. 124). Self-determination theory (SDT); Deci & Ryan, (1980, 1985b, 1991) specifically addresses the self-directed behavior that 4-H is designed to cultivate.

## *Significance*

Contemporary theories of motivation suggest that behaviors are initiated and maintained to a degree that is commiserate with beliefs of desired outcomes or goals. Self-determination theory suggests a different approach to understanding goal-directed behavior. SDT makes a distinction between the content of the goals and the process for pursuing goals or outcomes. SDT further explains that the degree to which people can satisfy their psychological needs has a significant impact on goal pursuit. Self-determination theory identifies psychological needs as competence, relatedness, and autonomy.

Although competence and relatedness are important elements for children owning values (Deci & Ryan, 2000), these needs must also be accompanied by feelings of autonomy. According to Deci & Ryan (2000, p. 238), "…although support for relatedness and competence needs may promote the internalization of a regulation or value, those supports alone will not be sufficient to foster integration."

Environments that are autonomy-supportive have a greater influence on the internalization of values and the self-regulation of values (Grolnick, Ryan & Deci, 1991; Williams & Deci, 1996). In environments that do not support autonomy, children are less likely to engage in desired behaviors, and experience feelings that are not conducive to healthy relationships (Assor, Roth & Deci, 2000). Designing youth development programs that are autonomy supportive is crucial for creating healthy relationships among the participants and leaders and for children to regulate their own engagement in positive behaviors. Measuring the presence of autonomy support is an important assessment of youth development programs.

In 1999-2000, the National 4-H Impact Assessment Project attempted to assess the effectiveness of 4-H programs on a national scale related to six different components. These components are related to: adults in 4-H, feelings about 4-H, learning in 4-H, helping others, planning and decision making and belonging in 4-H. The survey items assessed perceptions of the impact of 4-H in each of these six components and "critical elements of success," which include: a positive relationship with an adult, a safe environment, opportunities for mastery, opportunities to value and practice service to others, opportunities for self-determination, an inclusive environment, an opportunity to see oneself as part of the future and engagement in learning (National 4-H Impact Assessment Project, 2001). These constructs are mentioned by many authors as foundations of "best practices" of youth development programs (Ames, 1992; McLaughlin, Irby, & Langman, 1994; National Academy of Sciences, 2002; Werner, 1993). The results of the national 4-H assessment project indicate that there are very positive feelings toward 4-H from youth participants and adult leaders in regards to all survey items.

The authors of the National 4-H Impact Assessment Project (2001) indicate that, "4-H youth development programs reflect very positively the critical elements that researchers identify as essential to positive growth and development" (p. 5). The assumption from the beginning of the National Assessment research is that the critical elements are present in 4-H and all that is left is to determine how these elements affect the youth participants. Very few studies exist demonstrating the degree to which critical elements are present in youth development programs. The National 4-H Impact Assessment Project was the first national attempt to quantify the outcomes in youth that result from the presence of critical elements in a 4-H setting.

## *Purpose of Study*

While the National 4-H Impact Assessment Project was the first national attempt to quantify the outcomes in youth that result from the presence of the "critical elements of success" in a 4-H setting, this premise is the inherent weakness in the research project. The assumption from the beginning of this research is that the critical elements are present in 4-H and all that is left is to

determine how these elements affect the youth participants. The presence of critical elements has been taken for granted as an obvious characteristic of any program that involves young people. It has been this assumption that has informed too much of current youth development research.

And because of this, despite the well-worn claims that participation in after-school "youth development" activities and programs can build responsibility, character, and autonomy, there are few programs willing to put these claims to an actual test. Thus, this study was designed to determine the perceptions of an empowering (autonomy-supportive) climate among the participants of an out-of-school 4-H program.

## Methods

### *Participants*

The study involved 90 4-H club members who, as members of 15 conveniently sampled 4-H clubs, consented to participate in this study. The gender composition of the club member sample was 43 boys (47.8%) and 47 girls (52.2%). The sample makeup in the present study mirrors recent national 4-H figures. The National 4-H Council (2001) indicates that girls make up 53% and boys make up 47% of participating members. The mean age of the participant sample was 10.61 (standard deviation = 1.62 years.)

Participants in this study were a convenience sample of youth and adults selected from 4-H programs in various counties in Colorado and from Utah, Minnesota, Oklahoma, Kansas, Texas and Illinois. Although the participants in this study were a convenience sample, the author specifically chose members of 4-H clubs. In an attempt to explore empowerment as perceived by youngsters, it was desired to use members of a group that purports to facilitate empowerment.

### *Data Collection and Analysis*

Surveys were completed by club members during regularly scheduled monthly meetings. During each meeting, the purpose of the study was explained to the club members and their parents. The surveys used, were shown to the parents and club members and time for questions was provided. During survey completion, club members completed the survey in the presence of the author in case there was a lack of clarity in the survey items.

Building on the work of both Harter (1982) and Connell (1985), in order to avoid answering formats that elicited socially desirable responses, Grolnick, Ryan and Deci (1991) developed the Children's Perceptions of Parents Scale. This scale was developed to evaluate the perceptions of children about their own parenting environment, believing that parenting environments develop or forestall internal motivation styles (Grolnick, Ryan & Deci, 1991). The scale is comprised of 11 items that elicit responses about mothers and 11 that elicit responses about fathers.

The Perceptions of Parents Scale (POPS) was modified for this study, replacing the words "mother and father" with "4-H leader." Because the questions for mothers and fathers are identical, only 11 of the POPS questions were used in this study. The youth participants were asked to read descriptions of four different types of 4-H leaders and then decide which one is the best description of their own 4-H leader. The survey structure was also altered slightly for use in the present study.

Adapted from the Health Care Climate Questionnaire (Williams, Grow, Freedman, Ryan, & Deci, 1996), the Learning Climate Questionnaire (LCQ) (Williams & Deci, 1996) was used to evaluate the overall 4-H climate. The questions can be adapted so that the wording of each question pertains to the particular situation being studied or the questions can be stated so that a

general learning climate can be assessed. This questionnaire examines the autonomy support of the climate overall, rather than that of an individual leader or teacher.

In order to use the Learning Climate Questionnaire with 4-H participants, the word "instructors" was replaced with "4-H leaders." The encounters described in the LCQ were not altered otherwise. The LCQ was used to measure the perceptions of autonomy support of the 4-H leaders in general. Youth participants were asked to indicate their level of agreement with statements regarding encounters with their 4-H leaders.

## Results

A confirmatory factor analysis in the present study did not yield similar two factor loadings as in the original Grolnick, et al., (1991) study. The original POPS items loaded on an involvement subscale and an autonomy support subscale. Rather, using a principle component analysis extraction method with a promax rotation (duplicating procedures used in developing the original POPS), four factors emerged. Items that loaded on more than one factor and those items that explained little of the variance were removed from further analysis. Cronbach's alphas for the involvement subscale and the autonomy support subscale both were .49. Similar to the findings of Grolnick, Ryan and Deci (1991), who used a principle components procedure with a promax rotation, all loadings on the appropriate factor exceeded .35 while the cross loadings never exceeded .36. See Table 1 for modified POPS factor loadings.

## Table 1

Correlation Matrix for 11-item Modified POPS Scale (n=90)

| **Correlations** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Items | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1 | - | .154 | .035 | .287** | .297** | .137 | -1.91 | .071 | .239** | .073 | .013 |
| 2 | | - | .070 | .057 | .127 | .218** | .096 | .029 | .070 | -.022 | .090 |
| 3 | | | - | .018 | .193 | -.162 | .027 | .073 | .053 | -3.27** | .340** |
| 4 | | | | - | .252** | .200 | .025 | .169 | .208* | .229* | .090 |
| 5 | | | | | - | .133 | .016 | .255* | .227* | .057 | .225* |
| 6 | | | | | | - | .071 | .180 | .232* | .255* | -.140 |
| 7 | | | | | | | - | .080 | -.077 | .132 | -.040 |
| 8 | | | | | | | | - | -.047 | .106 | .194 |
| 9 | | | | | | | | | - | -.091 | .042 |
| 10 | | | | | | | | | | - | -.245* |
| ** Correlation is significant at the .01 level (2-tailed)<br>* Correlation is significant at the .05 level (2-tailed) | | | | | | | | | | | |

In order to address the major questions outlined a MANCOVA test was used. Analyses related to each question are presented below. Table 2 shows the means and standard deviations for each of the four measures for all 90 participants.

## Table 2

Factor Loading for 11-item Modified POPS (n=90)

| **Promax Rotated Factor Matrix** | | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | Communality |
| Item 1 | .597 | -- | -.426 | -.120 | .553 |
| Item 2 | .352 | -- | -- | .710 | .639 |
| Item 3 | .168 | .720 | .144 | -- | .576 |
| Item 4 | .626 | -.156 | -- | -.260 | .484 |
| Item 5 | .680 | .204 | -- | -.129 | .530 |
| Item 6 | .489 | -.480 | -- | .319 | .572 |
| Item 7 | -- | -.162 | .668 | .367 | .608 |
| Item 8 | .427 | -- | .543 | -.331 | .588 |
| Item 9 | .486 | -- | -.475 | .247 | .526 |
| Item 10 | .199 | -.712 | .227 | -.251 | .661 |
| Item 11 | .259 | .670 | .239 | -.108 | .584 |

A cursory review of the above table indicates that participants generally rated empowerment favorably on all measures, and with little variance on any single measure. The learning climate measure yields average scores ranging from 1 to 7, and the other three measures yield averages from 1 to 4 each. Although the mean score for leader involvement (3.35) is slightly greater than the means for leader support or opportunities for choice (3.06 and 3.05, respectively) a MANCOVA did not reveal any statistically significant differences among youngsters' responses to the four measures (see Table 3).

## Table 3

Correlation Matrix for 6-item Modified POPS (n=90)

| **Correlations** | | | | | | |
|---|---|---|---|---|---|---|
| Items | 1 | 5 | 9 | 7 | 8 | 10 |
| 1 | - | .297** | .239** | -.191 | .071 | .073 |
| 5 | | - | .227 | .016 | .255* | .057 |
| 9 | | | - | -.077 | -.047 | -.091 |
| 7 | | | | - | .080 | .132 |
| 8 | | | | | - | .106 |
| | | | | | | - |
| ** Correlation is significant at the .01 level (2-tailed)<br>* Correlation is significant at the .05 level (2-tailed) | | | | | | |

To examine gender and age effects on the four outcome measures, a multivariate analysis of covariance (MANCOVA) using age as the covariate was determined to be the most appropriate analytic procedure. The final MANCOVA revealed no significant effects for age, gender, or 4-H leader.

Analysis of the data indicated that youngsters generally have favorable perceptions of empowerment in their after-school 4-H programs. They view the overall 4-H climate as empowering. Also they regard their adult 4-H leaders as involved and autonomy supportive and as individuals who provide young 4-H club members with opportunities for choice. These perceptions held true irrespective of gender or age. Moreover, while there were too few members in each sampled club to determine statistically if perceptions differed across clubs, the low variability on all measures suggests that club was not a factor.

## Implications for Practice

Analysis of the data indicated that youngsters generally have favorable perceptions of empowerment in their 4-H programs. They view the overall 4-H climate as empowering. The 4-H participants also regard their adult 4-H leaders as involved and autonomy supportive, and as individuals who provide young 4-H club members with opportunities for choice. These perceptions held true irrespective of gender or age. Moreover, while there were too few members in each sampled club to determine statistically if perceptions differed across clubs, the low variability on all measures suggests that club was not a factor.

The present study was an investigation conducted to determine the perceptions of empowerment of individuals involved in youth development programs and the adult leaders of those programs. On the LCQ, the findings indicate that club members believe the overall climate of the 4-H club is more autonomy supportive than not. The mean score suggests that the overall climate of the 4-H club may be offering opportunities for youngsters to become engaged in making choices and/or taking an active role in asking questions or having their ideas acknowledged.

There was no difference between perceptions of climate between males and female club members. The youths in this study generally remarked that the 4-H club environment did support their autonomy. Other studies using the LCQ (Williams & Deci, 1996) did not find gender differences of the participants using the LCQ, which supports the results of the current study. This result is not similar however, to the results of a study completed by the National 4-H Council (2001).

The results of LCQ share some similarities with the results of a national 4-H study (2001), which asked leaders and club members questions regarding their experiences in 4-H. The 4-H study, conducted by the National 4-H council, was trying to determine the extent to which characteristics deemed "critical elements" of 4-H clubs exist. Although self-determination was deemed a critical element, there were no questions, in the national 4-H study on the survey specific to self-determination (e.g., autonomy, empowerment).

There are aspects of 4-H that certainly do support club members as agents of empowerment. Club members have opportunities to participate in various projects and are allowed the opportunities to choose to participate in any of these various projects. This is a positive aspect of 4-H as a youth development organization. There are limitations within the structure of 4-H however. As one 4-H leader said to me, "Once you decide on your project(s), everyone has to do pretty much the same thing and everyone's record book has to be kept pretty much the same way." This structure facilitates club members becoming passive about their experiences in 4-H.

### *Perceptions of Autonomy Support and Involvement*

The mean scores suggest that generally, club members found their 4-H leaders to be involved and autonomy supportive. This is true regardless of the gender or age of the club member. These results reflect the generally positive perception of 4-H leaders, by club members, found in a study conducted by the National 4-H Council (2001). In this survey, club members had positive perceptions of the adult leaders in 4-H. Questions asked in the 4-H survey regarded the adults influence over affective constructs (e.g., adults in 4-H make children feel good about themselves), and supporting involvement in the club (e.g., Adults in 4-H help children feel they can make a difference).

The involvement and autonomy support of a parent, or in the case of the current study, leaders of a group not only have a personal impact on the members of a group, but also influences the type of climate in which the group operates. While the club members perceived the climate and

the adult leaders to be supportive of autonomy, the nature of the questions may, in part, explain the responses given by the club members.

Certain practices within 4-H (i.e., participants are given some choices) may interfere with the perceptions of the adult leaders. Although elementary and middle school children are able to make distinctions among domains of activity (e.g., school, athletics) (Harter, 1982) they may have difficulty discerning between the choices inherent in 4-H and how the 4-H leaders support choice.

## Conclusion

Two primary conclusions may be drawn from this study. First, from the perspective of youth participants, the overall climate of the 4-H club is an empowering one. Irrespective of age, gender, or club membership, the 4-H climate was generally viewed as supporting autonomy. Second, youth participants perceive their adult leaders to be supportive of autonomy, involved, and willing to provide opportunities for choice. Again, these perceptions differed neither according to age, gender, nor club membership.

Although other studies regarding autonomy support have reported gender or grade-level effects, the results of the current study revealed no such differences among youngsters' perceptions of 4-H climate and leaders. Also, a study conducted by the National 4-H council indicated that as children get older, they begin to question 4-H as a valid opportunity for learning and decision-making. Again, no such age differences were detected in the present study.

For clubs involved in this study and for other youth development organizations, it seems prudent to include empowerment as a goal. This will require constant and conscious efforts to provide youngsters with greater opportunities and support for understanding, making, and accepting choices. Empowering climates coupled with appropriate autonomy-supportive behaviors from adult leaders can influence the emergence of intrinsically motivated behavior.

Although claimed as an important objective in many youth development programs, few programs have defined, much less operationalized, empowerment. Moreover, despite some researchers' attempts to characterize empowerment in terms of adult involvement, autonomy support, and opportunities for making choices, there appears to be uncertainty or misunderstanding among youngsters when asked to respond to questions about these concepts. Support for this statement derives from the lack of reliability that was identified within measures accompanied by a lack of relationship across measures used in the present study.

## References

Ames, C. (1992). Classrooms: Goals, structures, and motivation. Journal of Educational Psychology, 34(3), 261-271.

Assor, A., Roth, G., & Deci, E.L. (2000). *Relations of the perceptions of parental conditional love to children's affects and motivation.* Unpublished manuscript, Ben Gurion University, Beer-Sheva, Israel.

Connell, J.P. (1985). A new multidimensional measure of children's perceptions of control. *Child Development, 56,* 1018-1041.

Deci, E.L., & Ryan, R.M. (1980). The empirical exploration of intrinsic motivational processes. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 13, pp. 39-80). New York: Academic.

Deci, E.L., & Ryan, R.M. (1985b). Causality orientations theory: Personality influences on motivation. In E.L. Deci & R.M. Ryan (Eds.), Intrinsic motivation and self-determination in human behavior (pp. 149-175). New York: Plenum.

Deci, E.L., & Ryan, R.M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), *Nebraska symposium on motivation: Vol 38. Perspectives on motivation* (pp. 237-288). Lincoln: University of Nebraska Press.

Deci, E.L., & Ryan, R.M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry,* 11(4), 227-268. Achievement: Motivational mediators of children's perceptions of their parents. Journal of Educational Psychology, 83 (4), 508-517.

Grolnick, W.S., Ryan, R.M., & Deci, E.L. (1991). Inner resources for school achievement: Motivational mediators of children's perceptions of their parents. Journal of Educational Psychology*, 83* (4), 508-517.

Harter, S. (1982). The perceived competence scale for children. Child Development*, 53,* 87-97.

History of 4-H. (2007). Retrieved March 12, 2007, from http://www.4-h.org/about/

Jueds, V. (1994). From statistics to soup kitchens: Youth as resources in the 1990s. National Civic Review 83, (2), 120-126.

McLaughlin, M.W., Irby, M.A., & Langman, J. (1994). Urban sanctuaries: Neighborhood organizations in the lives and futures of inner-city youth. San Francisco: Jossey Bass.

National Academy of Sciences. (2002). The concerns-based adoption model (CBAM): A model for change in individuals. [Online]. Available: http://www.nationalacademies.org/rise/back4a.htm.

National 4-H Council. (2001). National 4-H Impact Assessment Project. Washington, D. C.

Werner, E.E. (1993). Risk, resilience, and recover: Perspectives from the Kauai: Longitudinal study. Special issue: Milestones in the development of resilience. Development and Psychopathology, 5 (4). 503-515.

Williams, G.C., & Deci, E.L. (1996). Internalization of biopsychosocial values by medical students: A test of self-determination theory. Journal of Personality and Social Psychology*,* 70, 767-779.

Williams, G.C., Grow, V.M., Freedman, Z.R., Ryan, R.M., & Deci, E.L. (1996). Motivational predictors of weight loss and weight loss maintenance. Journal of Personality and Social Psychology*,* 70, 115-126.

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# The Healing Species: Animal-Assisted Character Education for Improving Student Behavior

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# The Healing Species: Animal-Assisted Character Education for Improving Student Behavior

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**Abstract:** The Healing Species program aims to reduce disruptive behaviors at school by increasing students' abilities to avoid conflict when possible and to resolve conflicts peaceably when they occur. The program's 11 lessons incorporate elements of behavior theory that postulate behavior follows belief. This study hypothesized that 5th and 6th grade students who completed the Healing Species curriculum would show fewer normative beliefs favoring aggression, greater empathy, and fewer disciplinary infractions, than a comparable group of students who did not receive the Healing Species program. Lessons included the participation of rescued dogs to emphasize compassion, empathy, responsibility, and forgiveness. Study results offered evidence of improved overall behavior and specific reductions in violence and aggression.

## Introduction

Since the Columbine killings in 1999 elevated societal concerns about adolescent mental health, youth serving institutions have stepped up efforts to maintain safe, secure environments. Schools have been at the forefront of this movement, which has increased demand for programming to prevent school violence. The Healing Species program was developed to help pre-adolescent (ages 9-11) and adolescent youth (ages 12-15) acquire the knowledge and skills needed to disrupt cognitive-emotional circuits activating aggressive behaviors. The curriculum's 11 lessons incorporate the participation of rescued dogs to teach responsibility, compassion, empathy, and forgiveness to youth in school-based settings. The program aims to reduce interpersonal violence among students by reducing approval of aggression and increasing empathy.

A previous program evaluation found the Healing Species program appeared to reduce out-of-school suspensions for violent behavior by 55%, reduce retaliation aggression behavior by 66%, and increase choice making using empathy by 42% (Sprinkle, 2008). Anecdotal reports from teachers and guidance counselors described significant improvement in students' abilities to manage conflict without violence and demonstrate empathetic attitudes and behavior. Thus, Healing Species appeared to meet schools' needs for violence prevention programming that works. A shortcoming of the previous study, however, was the lack of a comparison group.

The present evaluation's quasi-experimental design included a comparison group whose outcomes provided added context in interpreting the evaluation findings.

The Healing Species character education program was developed 10 years ago following its founder's observation that the violent offenders she encountered as a criminal lawyer had common histories as perpetrators of animal abuse. In support of the founder's experience, a substantial body of literature has concluded that cruelty toward animals in childhood is a reliable indicator of conduct disorder in adolescents, a predictor of violent behavior in adulthood, and a marker for children experiencing abuse (Flynn, 1999; Miller & Knutson, 1997).

On the other hand, animal cruelty may be symptomatic of underlying conditions that, if ameliorated, may eliminate a child's maladaptive behavior. In Ghosts from the Nursery: Tracing the Roots of Violence (Karr-Morse & Wiley, 1997), the authors present overwhelming evidence that conduct disorder has its basis in early disruption, trauma, and abuse, making the case that much antisocial behavior is preventable or remediable. This finding is consistent with the literature on aggression which has shown differences in aggressive behavior appear to result from interactions among an individual's biological predisposition, physical environment, and social learning (Anderson et al., 2003; Berkowitz, 1993; Patterson, DeBaryshe, & Ramsey, 1989).

Sentinel indicators of youth well-being are grim in the community and schools in which the Healing Species program was conducted. Over 80% of the students at the two schools in the study qualify for the free- or reduced-price lunch program, an indicator suggestive of poverty and concomitant stress. According to US Census Bureau estimates for 2007, the surrounding county's overall poverty rate of 23.2% exceeds the state poverty rate of 15% and is nearly double the national rate of 13%. At 29.2%, the poverty rate is higher still among Black or African Americans who comprise 63% of the county's population and 92% of the students served by the Healing Species program.

A substantial body of literature has documented the correlation between poverty and low academic achievement. The relationship was evident among the students in the study. While 70% of the elementary students tested met state standards for English/Language Arts in 2007, success rates in the other core domains of Mathematics, Science, and Social Studies were 63.6%, 41.7%, and 58.3%, respectively. The middle school students—grades 6, 7, & 8—missed the 70% mark in all four domains at all three grade levels.

Research examining the income-achievement gap has found significant cognitive deficits among children living in poverty (Farah, et al., 2006). Evans and Schamberg found childhood poverty negatively affected working memory in young adults, and the memory deficits may have been biological consequences of chronic stress (Evans & Shamberg, 2009). Embry's findings on the effects of stress on youth brain development and behavior have informed the development of interventions to supplant the perceived rewards of aggression and other antisocial behaviors (Embry, 1996, 1999, 2004). In the absence of effective interventions, stress has shown to be a factor in youth aggression and violence.

Before implementing the Healing Species program, the schools described problems with disruptive student behaviors. In the preceding school year, the rate of student referrals to the administrative office for disciplinary violations was 18.8%. Incidents involving aggressive behavior among students (fighting, threats, intimidation, hitting, obscene gestures) were 11% of the 1,404 total violations by 5th and 6th grade students. Aggressive student behaviors towards teachers and other staff were 40% of the total. Offenses in this category included simple assault, threats, disrespect, and refusal to obey. Healing Species sought to reduce the incidences of aggression and violence by teaching the students prosocial strategies for managing stress and conflict.

The risk factors posed by academic difficulties and economic distress are exacerbated by the students' exposure to community violence. In 2007, the county's rate of violent crime (murder, rape, robbery, and aggravated assault) was 67.29 per 10,000 residents and has increased 8.9% since 2005. Dog fighting and other organized criminal activity also negatively impact children's socialization in the largely rural county. Exposure to community violence has been linked to children's increased risk for developmental deficits, behavioral problems, and academic failure (Haberman, 1994; Perry, 1999).

## Methods

The study hypothesized that 5th and 6th grade students who completed the Healing Species curriculum would show fewer disciplinary infractions, fewer normative beliefs favoring aggression, and greater empathy than a comparable group of students who did not receive the Healing Species program. Based on the literature, the study expected improved behavior to follow a reduction in approval of aggression and an increase in empathy.

Behavior Hypothesis

$H_0$: Completing the Healing Species program will have no effect on or increase students' rate of incurring disciplinary infractions

$H_A$: Completing the Healing Species Program will reduce the rate at which students incur disciplinary infractions

Aggression Hypothesis

$H_0$: Completing the Healing Species program will have no effect on or will increase students' normative beliefs favoring aggression

$H_A$: Completing the Healing Species Program will reduce students' normative beliefs favoring aggression

Empathy Hypothesis

$H_0$: Completing the Healing Species Program will have no effect on or will decrease students' cognitive levels of empathy

$H_A$: Completing the Healing Species Program will increase students' cognitive levels of empathy

The evaluation included one middle school serving grades 6-8 and one feeder elementary school, grades K-5. Due to small class sizes, all of the fifth and sixth graders at each school were invited to participate. The schools were selected based on their previous experience with the Healing Species program and their interest in helping the program to be rigorously evaluated. The schools were in a low-income urban district, and the student populations were 92% black or African American, in contrast to a previous study where the majority of participants were non-Hispanic white (Sprinkle, 2008). The study population's demographics are shown in Tables 1 and 2 below.

### Table 1

Participant Demographics (Gender and Race by Grade)

| GENDER | 5th Grade (n = 22) | | | | 6th Grade (n = 179) | | | TOTAL |
|---|---|---|---|---|---|---|---|---|
| | Black | White | Other | | Black | White | Other | |
| Female | 12 | 1 | 1 | | 86 | 18 | 2 | **120** |
| Male | 5 | 3 | 0 | | 51 | 21 | 1 | **81** |
| **TOTAL** | **17** | **4** | **1** | | **137** | **39** | **3** | **201** |

## Table 2

Participant Demographics by Study Group

| RACE | | | GENDER | | |
|---|---|---|---|---|---|
| | | | Male | Female | Total |
| **Black** | **Group** | Comparison | 24 | 34 | 58 |
| | | Treatment | 32 | 64 | 96 |
| | | Total | 56 | 98 | 154 |
| **White** | **Group** | Comparison | 11 | 3 | 14 |
| | | Treatment | 13 | 16 | 29 |
| | | Total | 24 | 19 | 43 |
| **Other** | **Group** | Comparison | 1 | 0 | 1 |
| | | Treatment | 0 | 3 | 3 |
| | | TOTAL | 1 | 3 | 4 |
| **Full Group Total** | | | **81** | **120** | **201** |

The project distributed 332 consent forms to parents/caregivers and 242 were returned for a response rate of 72.9%. The initial study sample consisted of 32 fifth graders and 206 sixth graders. Attrition caused by internal student transfers and external family mobility reduced the final population to 201 students with matched pre- and post-tests.

## Measurement

The measurement instruments used were the Normative Beliefs About Aggression Scale (NOBAGS; Huesmann & Guerra, 1997; Huesmann, Guerra, Miller, & Zelli, 1989), and the Index of Empathy for Children and Adolescents (IECA; Bryant, 1982). Both instruments were used in the previous evaluation of The Healing Species program (Sprinkle, 2008) and were carried forward to the current evaluation for consistency in assessing the program's impact. NOBAGS (alpha = .86) has been standardized and normed on urban student populations with demographics characteristics matching those of the students in the current evaluation's program and comparison groups (Huesmann & Guerra, 1997). For the population included in this evaluation, the reliability of the instrument, as determined by Cronbach's alpha, was .81. The NOBAGS consists of 20 questions comprising a large scale, and two subscales.

The first subscale, questions 1-12, measures Retaliation Aggression (aggression in response to provocation). The second subscale consists of questions 13-20 and measures approval of General Aggression (no specific conditions). One large scale, Total Aggression, encompasses questions 1-20. Each question is scored on a 4-point scale, from 1=Really Wrong, to 4=Perfectly OK. For each scale, lower scores indicate fewer normative beliefs about aggression. The scoring ranges for each scale are shown in the table below. Scores for each scale are calculated as the mean of the scores on each question on the scale that is answered by the respondent.

## Table 1

Scale for Scoring Responses to NOBAGS

| SCALE | SCORING RANGE |
|---|---|
| Retaliation Aggression | 12 to 48 |
| General Aggression | 8 to 32 |
| Total Aggression | 20 to 80 |

The IECA (alpha= .81) was the subject of a validation study involving a population of socioeconomically diverse elementary and middle school students. Among the students participating in this study of the Healing Species project, the instrument's reliability was .907 as determined by Cronbach's alpha. The Index of Empathy for Children and Adolescents is designed as one large scale of 22 questions. The minimum score is 0, and the maximum is 22. The instrument has two versions with different response sets depending on the ages of the study population. The Yes/No format was used for this evaluation because of the number of participants who were 11 years old or younger. Higher scores indicate high levels of empathy, and low scores indicate low levels of empathy (Bryant, 1982).

To assess the impact of beliefs upon behavior, the study used student disciplinary data from the school district's database. The school district's disciplinary data consisted of a report of infractions by date and type. From the report, the study determined pre- and post-intervention incidences of disciplinary infractions for each student and the total number of infractions by date and type for the Program and Comparison groups.

## Design and Procedures

The evaluation employed a quasi-experimental nonequivalent group design. Pure random assignment to the treatment or control group was not possible within the school setting without significant disruptions to existing pupil classroom assignments. Rather, intact classrooms were arbitrarily divided into two groups, Program and Comparison, at each grade level. The Program classrooms received the Healing Species program during fall semester of school year 2007-08. The Comparison group classrooms subsequently received the program in the following spring. The consenting students in both groups were administered the NOBAGS and IEAC instruments one week prior to the Program group's first Healing Species lesson. To minimize risks of data loss due to literacy problems or other reading comprehension difficulties, the instruments were administered by reading the questions aloud to the students.

During weeks two through twelve, the Program group completed the Healing Species curriculum, one lesson per week. The three instruments were re-administered to all participants in both groups in the week following the last Healing Species lesson for the fall semester. To measure student behavior, the study collected disciplinary data by student, date, and type of infraction for each semester of the 2007-08 school year.

Healing Species' lessons are designed for presentation in order from 1 to 11. For implementation fidelity, the program was presented during social studies class periods. Incorporating the program through a core subject enabled Healing Species to reach all fifth and sixth grade students, which helped to mitigate threats to internal validity from the lack of pure random assignment. Classrooms in the comparison group received the Healing Species lessons during the last 11 weeks of the spring semester to enable access for all students to the curriculum's potential benefits.

## Results

Data analysis was conducted using SPSS Version 16.0. All significant values are reported at p values corresponding to *$p < .05$, **$p < .01$, or ***$p < .001$. Two-tailed comparisons between observed values and test statistics were used because the study made no assumptions regarding the direction of change in beliefs or behavior for the Comparison group.

Data were first analyzed to determine if the two groups were indeed comparable despite the absence of true random assignment. The Levene test of homogeneity of variances was used to test for significant differences in the groups' pre-intervention scores on each measure. The results showed no significant selection bias ($p < .05$). The results were consistent with the

schools' inclusion model for pupil assignment. Each of the classrooms in the study was equally likely to have students whose unique intellectual, physical, emotional, or mental characteristics may have been expected to influence the students' scores on the pre- and post-tests.

### Results for Normative Beliefs About Aggression (NOBAGS)

Paired-samples T-tests were conducted to assess the direction and magnitude of change in the students' pre- and post-test scores.

- Analysis of the Program group's mean scores on the measures of aggression revealed the theorized decline in approval of aggression occurred in one dimension, Retaliation Aggression. Overall, however, the changes in the group's mean scores between pre- and post-test did not achieve significance at the level p=.05.

**Table 2**

Paired Samples T-tests of NOBAGS Scores for Program Group

| NOBAGS Dimension | Paired Differences | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | t | df | Sig. (2-tailed) |
| | | | | Lower | Upper | | | |
| Total Aggression Pre-test<br>Total Aggression Post-test | .01694 | .43469 | .03842 | -.05909 | .09297 | .441 | 127 | .660 |
| General Aggression Pre-test<br>General Aggression Post-test | .05999 | .48020 | .04244 | -.02400 | .14398 | 1.413 | 127 | .160 |
| Retaliation Aggression Pre-test<br>Retaliation Aggression Post-test | -.01095 | .55450 | .04901 | -.10793 | .08603 | -.223 | 127 | .824 |

The Comparison group's mean scores on the NOBAGS instrument indicated stronger normative beliefs favoring aggression (Table 5). The significance levels were p<.05 and p<.01, respectively, for the observed increases in approval for Total and Retaliation aggression

**Table 3**

Paired Samples T-tests - Comparison Group's Pre-/Post-test NOBAGS Scores

| NOBAGS Dimension | Paired Differences | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | t | df | Sig. (2-tailed) |
| | | | | Lower | Upper | | | |
| Total Aggression Pre-test<br>Total Aggression Post-test | 3.15 | 10.94 | 1.28 | .59906 | 5.70231 | 2.461 | 72 | .016 * |
| General Aggression Pre-test<br>General Aggression Post-test | .52 | 5.04 | .59 | -.65450 | 1.69560 | .883 | 72 | .380 |
| Retaliation Aggression Pre-test<br>Retaliation Aggression Post-test | 2.63 | 7.94 | .93 | .77722 | 4.48306 | 2.830 | 72 | .006 ** |

**p<.05; **p<.01*

Regression analysis was used to assess the significance of the differences in outcomes between the Program and Comparison groups. Post-test scores for each NOBAGS scale and the IECA were regressed on the matched pre-test scores. The regression equation estimated was:

$Yi = B_0 + B_1X_i + B_2Z_i + e_i$, *where:*

| | | |
|---|---|---|
| $Y_i$ | = | Mean post-test score |
| $B_0$ | = | Expected value of $Y_i$ when $X_i$ and $Z_i$ equal zero |
| $B_1$ | = | Mean difference for Program Group |
| $X_i$ | = | Mean score at pre-test |
| $B_2$ | = | Group effect |
| $Z_i$ | = | Dummy variable for Group (0=Comparison, 1=Program) |
| $e_i$ | = | Residual (observed change in $Y_i$ that is not explained by $X_i$ and $Z_i$) |

## Total Aggression

## Table 4

NOBAGS Total Aggression—Regression Results, Coefficients (Standard Error)

| | | | |
|---|---|---|---|
| $Y_i$ = | 14.984 | + .690 $X_i$ – | 3.670 $Z_1$ |
| | | (.052) | (1.259) |
| | | t = | –2.915** |
| | n = 201 | $R^2$ = | .49 |

***p < .01*

The mean difference between the two group's pre- and post-test scores for Total Aggression was 3.67 points. The difference was determined to be significant at the 99% confidence level (t=-2.915, p<.01).

## General Aggression

The difference between the Program and Comparison group's pre- and post-test scores for General Aggression was very near the significant level (t=-1.953, p = 0.052).

## Table 7

NOBAGS General Aggression – Regression Results, Coefficients (Standard Error)

| | | | |
|---|---|---|---|
| $Y_i$ = | 4.297 + | .709 $X_i$ – (.050) | 1.139 $Z_1$ (.583) |
| | | t = | – 1.953 |
| | | $R^2$ = | .51 |
| | n = 201 | | |

## Retaliation Aggression

The mean difference in approval of Retaliation Aggression between pre- and post-test was approximately 2.62 points. The observed difference in outcomes between the Program and Comparison groups was significant (t=-2.931, *p<.01*).

## Table 5

NOBAGS Retaliation Aggression—Regression Results, Coefficients (Standard Error)

| | | | |
|---|---|---|---|
| $Y_i$ = | 13.098 + | .585$X_i$ – | 2.615$Z_1$ |
| | | (.058) | (.892) |
| | | t = | – 2.931** |
| | n = 201 | $R^2$ = | .36 |

***p < .01*

The results for aggression suggested the Healing Species program may have arrested the progression toward more favorable beliefs about aggression that typically occurs among children as they accumulate more life experience. In their study of normative beliefs about aggression, Huesmann and Guerra found the greatest increases in approval of aggression and actual aggressive behavior occurred during the early elementary school years; and by fifth grade, normative beliefs about aggression are predictive of actual aggressive behavior in sixth grade (Huesmann & Guerra, 1997).

## Results for the Index of Empathy

Paired-samples T-tests were conducted to assess the direction and magnitude of change in the Program Group's pre- and post-test scores in the Index of Empathy for Children & Adolescents (IECA). There was a significant decline between pre-test (M=12.20, SD=3.65) and post-test (M=11.06, SD=4.32) IECA scores t(127)=3.62, p<.01. The direction of the observed change was the opposite of the program's intended effect.

Outcomes were similar among the Comparison group students. Scores on the IECA declined between pre-test (M=11.30, SD=3.178) and post-test (M=10.99, SD=3.18), however the change was not significant t(72)=.88, p=.380. Regression analysis to compare IECA scores between the Program and Comparison groups revealed no significant difference in the post-test results for the two groups.

## Table 9

Index of Empathy – Regression Results, Coefficients (Standard Error)

| | | | |
|---|---|---|---|
| $Y_i$ = | 3.384 + | .673$X_i$ – | .521$Z_1$ |
| | | (.066) | (.473) |
| | | t = | – 1.102 |
| | n = 201 | $R^2$ = | .35 |

*p*=.264

Pre-test to post-test comparisons of the entire study group's NOBAGS and IECA scores revealed negative correlations, indicating higher NOBAGS scores at pre-test were associated with lower post-test IECA scores. The negative correlation, together with the group's lower post-test score on the IECA, suggested the program may have been less effective among a small but influential subset of students with stronger favorable attitudes towards aggression.

## Table 6

Pretest to Posttest Comparisons of NOBAGS and IECA Scores

| | Retaliation Aggression | General Aggression | Total Aggression |
|---|---|---|---|
| IECA-Posttest | −.196* | −.306** | −.270** |

**Pearson's correlation is significant at the p<.05 level (two-tailed)*
***Pearson's correlation is significant at the p<.01 level (two-tailed)*

## Discipline-related Outcomes

To assess the relationship between beliefs and behavior, the study analyzed discipline data for the Program and Comparison groups for the fall and spring semesters. Analysis of the disciplinary data was complicated by the concurrency of the study period and the disciplinary periods under review. Data for the 4-weeks between the first day of school and the start of the Healing Species project showed students in the Program and Comparison groups began the school year incurring disciplinary referrals at similar rates. The number and rate of referrals for each group are summarized in Table 8. It is important to note the data in Table 8 precede the actual designation of the groups for the study. For the students who received disciplinary referrals before the start of the Healing Species project, the table reflects the group to which the students' classrooms were later assigned.

## Table 7

Disciplinary Referrals Prior to Implementation of Healing Species Curriculum

| **Study Group** | **Number (Rate) of Disciplinary Referrals** |
|---|---|
| Program (n=128) | 15 (11.72%) |
| Comparison (n=73) | 8 (10.96%) |
| **Total (n=201)** | **23 (11.44%)** |

The project expected to see increases in the total number of disciplinary referrals from the start of Healing Species to the end of the school year. This expectation arose from a review of the schools' disciplinary practices, which showed the reporting of infractions increases as the school year progresses. Student behavior did not necessarily worsen, but tolerance of misbehavior decreased as behavioral expectations were steadily raised and consistently communicated over the course of the school year. Subsequent misbehavior resulted in graduated sanctions, which increased the number disciplinary referrals that were serious enough for entry into the school district's Schools Administrative Student Information (SASI) system.

The study hypothesized that the increase in referrals would be smaller for the Program group as the Healing Species lessons began to take effect. The regression equation estimated for disciplinary referrals was: $Yi = B_0 + B_1Z_i + e_i$, where:

| | | |
|---|---|---|
| $Y_i$ | = | Students' total number of disciplinary referrals for 2007-08 |
| $B_0$ | = | Expected value of $Y_i$ when $Z_i$ equals zero |
| $B_1$ | = | Group effect |
| $Z_i$ | = | Dummy variable for Group (0=Comparison, 1=Program) |
| $e_i$ | = | Residual (observed change in $Y_i$ that is not explained by $Z_i$ ) |

## Regression Results for Disciplinary Referrals

The study first estimated the effect of the Healing Species project on total disciplinary referrals for the Fall 2007 semester during which the project's curriculum was delivered to the Program group. The results reflected an average difference of nearly two fewer (1.6) referrals per student for students who received the Healing Species lessons.

### Table 12

Fall Disciplinary Referrals – Regression Results, Coefficients (Standard Error)

| | | |
|---|---|---|
| $Y_{i =}$ | 2.548 | $1.618Z_1$ |
| | – | |
| | | (.337) |
| | t = | – |
| | | 4.807*** |
| n = 201 | $R^2$ = | .10 |

****p < .001*

Next, the study examined total disciplinary referrals through the end of the spring semester, also marking the end of the school year, to assess retention of the observed program effect among the students who completed Healing Species in the fall (Table 13). By the end of the school year, the gap between the fall Program and Comparison groups widened, with the Program group students accumulating approximately 4 fewer referrals per student for the year.

### Table 13

School Year 2007-08 Disciplinary Referrals – Regression Results, Coefficients (Standard Error)

| | | |
|---|---|---|
| $Y_{i =}$ | 7.589 | $4.378Z_1$ |
| | – | |
| | | (.915) |
| | t = | – |
| | | 4.782*** |
| n = 201 | $R^2$ = | .10 |

****p < .001*

A primary goal of the Healing Species lessons is to teach nonviolent strategies for conflict resolution. Therefore, the study's analysis of disciplinary data included separate analyses of referrals for aggressive and violent behaviors. Discipline codes included in these categories were: Hitting Others, Fighting, Simple Assault, Threat to Student, Intimidation, and Threat to Staff. The school district's discipline codes include other acts of violence such as Aggravated Assault and Possessing a Weapon, however the study was limited only to actual disciplinary infractions committed during the 2007-08 school year. As shown in Table 14, the results for the fall semester suggested a weak (R2 = .05), but significant, program effect:

## Table 14

Fall Semester Aggressive & Violent Behaviors – Regression Results, Coefficients (Standard Error)

| | | |
|---|---|---|
| $Y_{i =}$ | .411 | $.270Z_1$ |
| | – | |
| | | (.086) |
| | t = | – |
| | | 3.127** |
| n = 201 | $R^2$ = | .05 |

****p < .01*

Though not as robust as anticipated (R2 = .08), the program effect appeared to have persisted through the end of the school year, as reflected in the regression results shown in Table 15. For the 2007-08 school year, the Program group received .57 fewer referrals per student for aggressive or violent behavior.

## Table 15

School Year 2007-08 Aggressive & Violent Behaviors – Regression Results, Coefficients (Standard Error)

| | | |
|---|---|---|
| $Y_{i =}$ | .945 | $.570Z_1$ |
| | – | |
| | | (.142) |
| | t = | – |
| | | 4.024*** |
| n = 201 | $R^2$ = | .08 |

****p < .001*

## Discussion

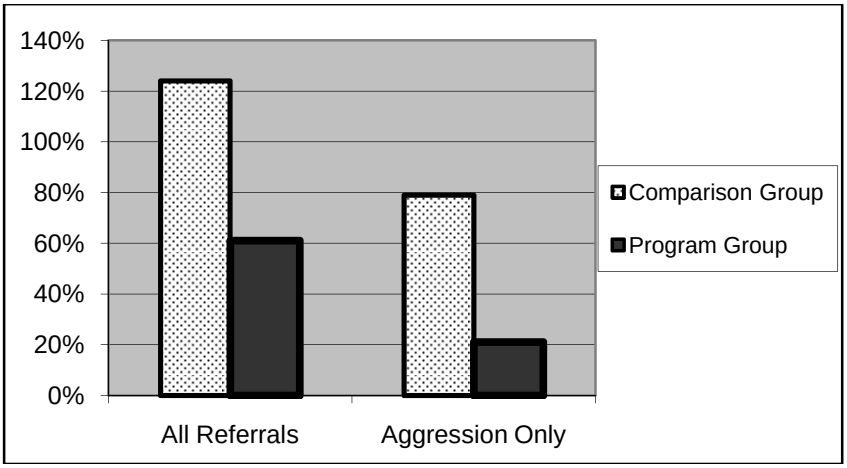
The results for students' normative beliefs about aggression were consistent across all three measures. For Retaliation, General, and Total aggression, post-test scores on approval of aggression declined as theorized. The results for Total and Retaliation aggression, combined with the students' positive behavioral outcomes, suggest it may be reasonable to conclude the results for General Aggression were indeed significant, and the slightly higher p value may have been attributable to random error.

Findings regarding students' cognitive expression of empathy were inconsistent with social development theory, which has found higher levels of empathy are typically correlated with lower levels of aggression. In this study, students exhibited improved behavior despite observed deterioration of students' cognitive standards regarding empathic behaviors.

Completing the Healing Species curriculum did not appear to decrease the Program Group's approval of aggression; however, increased normative beliefs approving of aggression were evident for the Comparison Group. This suggested Healing Species' may have helped prevent the Program Group's pre-intervention normative beliefs from deteriorating. The relative stability of the Program Group's attitudes toward aggression was consistent with the student discipline measures, which showed improved overall behavior and specific reductions in the incidences of violence and aggression (Figure 1).

**Figure 1**

Change in Rate of Disciplinary Referrals from Dec 2007 to May 2008




The demographics of the study participants were an uncertain factor in the study's outcome hypotheses. The study population was 60% female; among these, 72% were Black or African American. Based on a body of research showing females tend to be more empathic than males, the preponderance of girls (60%) in this study appeared to support our hypothesized increase in empathy. At the same time, research has also documented higher levels of normative beliefs about aggression among children living in poor, urban neighborhoods, a description that characterized 68% of our study population (Anderson, 1990; Fingerhut & Kleinman, 1990). The final study results were consistent with earlier findings of smaller differences in scores on the Index of Empathy (IECA) for African American students, despite the female majority in the study population (Sprinkle, 2008).

To the extent aggressive or violent behavior represents attempts to exercise power, the program's apparent success in reducing violent and aggressive behaviors may be explained by the curriculum's focus on practical strategies for asserting personal power without resorting to aggression or violence. Students were encouraged to recognize and take responsibility for their feelings by:

1) finding someone they could talk to;
2) grieving hurtful events; and
3) healing hurt feelings by showing love to an animal, another person, or oneself.

Where students may have believed aggressive or violent behavior offered some influence, however limited, over their world, the Healing Species lessons modeled alternative ways to exert power, e.g., setting and achieving goals, caring for the more vulnerable, and acting from awareness of one's self-worth. Lessons were reinforced by the presence of the rescued dog and the facilitator's recounting of the dog's story to illustrate resilience and demonstrate that positively changing someone's world—even that of an abused or abandoned animal—was within nearly everyone's personal power.

Overall, the disparities between the students' observed behavior and their cognitive beliefs may have been due to incongruity between the curriculum's intended and actual cognitive targets. Behavioral results were encouraging, but additional study is needed to determine how the Healing Species' program elements effect behavioral change.

## Conclusion

The evaluation's implications for increased school safety and effective classroom management should be of interest to anyone with a stake in ensuring that schools provide safe, nurturing environments where learning can take place. For teachers, school administrators, and parents, practical considerations of the observed changes on student behavior included:

- Of the 63 students who received no disciplinary referrals for the school year, 45 (nearly 75%) were in the Program group.
- Program group students accounted for 49 (83%) of the 59 students who received 3 referrals or fewer for the school year.

The Healing Species program appeared to facilitate positive changes in student behavior, though the program's impact on beliefs that were hypothesized to drive behavior was less certain. Further study is indicated to determine which cognitive factors that influence behavior are impacted by Healing Species and how those factors may be incorporated to strengthen the program's benefits to diverse study populations.

## References


Anderson, E.J. (1990). Streetwise: Race, class, and change in an urban community. Chicago: University of Chicago Press.

Berkowitz, L. (1993). Pain and Aggression: Some Findings and Implications. *Motivation and Emotion*, 17:3, 277-293.

Bryant, B.K. (1982). An Index of Empathy for Children and Adolescents. *Child Development,* 53:2, 413-425, 1982.

Embry, D.D. (2004). Community-based Prevention Using Simple, Low-Cost, Evidence-Based Kernels and Behavior Vaccines. *Journal of Community Psychology,* 32:5, 575-591.

Embry, D.D. (1996). Reasons for hope: creating a climate for change and resiliency. In W.L. Reed (ed.) *Violence and Childhood Trauma: Understanding and Responding to the Effects of Violence on Young Children*. Cleveland, OH: Urban Child Research Center.

Embry, D.D., & Flannery, D.J. (1999). Two sides of the coin: Multi-level prevention and intervention to reduce youth violent behavior. A chapter for D.J. Flannery and C. Ronald Huff (eds.), *Youth Violence: Prevention, Intervention and Social Policy*. Washington, DC: American Psychiatric Press.

Evans, G.W., & Schamberg, M.A. (2009). Childhood poverty, chronic stress, and adult working memory. Proceedings of the National Academy of Sciences of the United States of America (PNAS), published online, doi: 10.1073/pnas.0811910106.

Farah, M.J., et al. (2006). Childhood poverty: Specific associations with neurocognitive development. *Brain Research* 110:166-174.

Fingerhut, L.A., & Kleinman, J.C. (1990). The international and interstate comparisons of homicide among young males. *Journal of the American Medical Association, 263*:24, 3292–3296.

Flynn, C.P. (1999). Animal Abuse in Childhood and Later Support for Interpersonal Violence in Families. *Society and Animals* 7:2,161-171.

Haberman, M. (1994). Gentle Teaching in a Violent Society. educational HORIZONS 72:3, 238-248.

"Helping Traumatized Children: A Brief Overview for Caregivers," by Bruce Perry, M.d., Ph.D., Child Trauma Academy, August 1999.

Huesmann, L., Rowell, & Guerra, N.G. (1997). Children's Normative Beliefs About Aggression and Aggressive Behavior. *The Journal of Personality and Social Psychology* 72:2, 408-419.

Huesmann, L., Rowell, Guerra, N.G., Miller, L., & Zelli, A. (1989). The Normative Beliefs about Aggression Scale. Chicago: University of Illinois

Karr-Morse, R., & Wiley, M. (1997). *Ghosts from the Nursery: Tracing the Roots of Violence*. New York: Atlantic Monthly Press.

Kellert, S.R., & Felthous, A.R. (1985). Childhood Cruelty toward Animals Among Criminals and Noncriminals. *Human Relations* 38:12, 1113-1129.

Miller, K.S., & Knutson, J.F. (1997). Reports of Severe Physical Punishment and Exposure to Animal Cruelty by Inmates Convicted of Felonies and by University Students. *Child Abuse and Neglect: The International Journal* 21: 1, 59-82.

Patterson, G.R., Debaryshe, B.D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist*, 44:2, 329-335.

Perry, B.D. (2000). Traumatized Children: How childhood trauma influences brain development. *The Journal of the California Alliance for the Mentally III* 11:1, 48-51.

Sprinkle, J.E. (2008). Animals, Empathy, and Violence: Can Animals Be Used to Convey Principles of Prosocial Behavior to Children? *Youth Violence and Juvenile Justice* 6:1, 47-58.

U.S. Census Bureau. (2005-2007). American Community Survey 3-year Estimates. Retrieved from http://factfinder.census.gov.

U.S. Census Bureau. (2009). State and County QuickFacts. Retrieved from http://quickfacts.census.gov.

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# Integrative Literature Review of Adolescent Risk and Health Compromising Behaviors Guided by the Problem Behavior Theory

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# Integrative Literature Review of Adolescent Risk and Health Compromising Behaviors Guided by the Problem Behavior Theory

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**Abstract:** Twenty percent of the world's population is adolescents. Although generally healthy, risky behaviors result in premature death from injury and establish lifestyle choices which may give rise to poor health and disability during adult life. This integrative review presents the state of the literature related to adolescent health risk behaviors as framed by the problem behavior theory. The key word search using the databases of ERIC, CINAHL Plus with full text, PsycARTICLES, and PsycINFO yielded an internationally representative group of articles consistent with the guiding framework. Fifteen articles related to risk factors, protective factors, risk behaviors, and health-compromising behaviors of adolescents were retained from the past five years. Although the literature is replete with research involving adolescents, gaps are identified, and recommendations for future research are considered.

## Introduction

Twenty percent of the global population is made up of adolescents. They are expected to be healthy, yet risky behaviors result in premature death from many causes including motor vehicle crashes, suicide, drug overdose, and violence (World Health Organization [WHO], 2009). During the journey from childhood to adulthood, lifestyles and habits are established. Choices such as tobacco, drug, and alcohol use, unhealthy eating habits, and physical inactivity result in subsequent impaired adult health, creating a social and financial burden to society. One third of chronic adult disease and two thirds of premature death relate to health behavior patterns established during adolescence (WHO, 2008).

This literature review is guided by problem behavior theory, a theory which attempts to explain a number of factors that drive decision during adolescence. The theory posits that certain forces push youth towards and pull them away from deviant or problem behaviors, creating a dynamic psychological state influencing their actions to reach socially defined goals (Jessor, Graves, Hanson, & Jessor, 1968). The purpose of this integrative literature review is to use the theory-based framework to investigate the state of the literature related to risky behaviors of adolescents and identify gaps in the current knowledge base.

The leading cause of death among teens is unintentional injuries from motor vehicle crashes, drowning, and burns. In the United States (US), 85% of adolescents don't wear helmets when riding a bicycle, 11% don't wear seat belts, and 29% ride with people who have been drinking alcohol. Suicide and community/family violence are also leading causes of death among 15 to 19 year old people (WHO, 2008). In the US, more than 14% of teens report considering suicide, 7% report an actual suicide attempt, and 18% report carrying a weapon (Centers for Disease Control and Prevention [CDC], 2008).

Currently, 150 million teens use tobacco products (WHO, 2008). In a recent study, 20% of U.S. students smoked cigarettes and 8% used smokeless tobacco. Alcohol and other drug use is even more prevalent with 75% reporting that they had tried alcohol at least once, 45% reported recent drinking, 26% drank five or more drinks of alcohol in a row, and 38% used marijuana (CDC, 2008).

Overweight and obesity is increasing in both low income and high income countries (WHO, 2008). In the US, 13% of students are obese and about 16% are overweight. Almost 65% do not meet recommended levels of physical activity and over 35% watch at least 3 hours of television daily (CDC, 2008).

These statistics demonstrate that many adolescents are at risk of not remaining healthy, yet the data do not inform researchers of the risk and protective factors associated with participation in unhealthy and risky behaviors. This literature review will explore a portion of the available research about risk and protective factors and their relation to health risk and health compromising behaviors.

## Method

The problem behavior theory, used to guide this review, has been the basis for empirical research for over 40 years and the literature would be overwhelming without placing some limits on the review. Therefore this review focused on publications between the years of 2004 to 2009. Databases included ERIC, CINAHL, PsycARTICLES, and PsycINFO. The key word search included adolescent, behavior, risk factors, and protective factors. Additional limiters were English language, peer reviewed, research, and journal articles.

Fifty articles were identified. Because the intent of this review was to examine research specifically using the guiding theory, 15 studies using the theory or models consistent with the theory were retained. With one exception, studies of middle school youths were not used as the definition of middle school varies making comparisons difficult. Because the literature review sought to discover research explicating the relationships within the model, studies of interventions and risk reduction programs were specifically excluded.

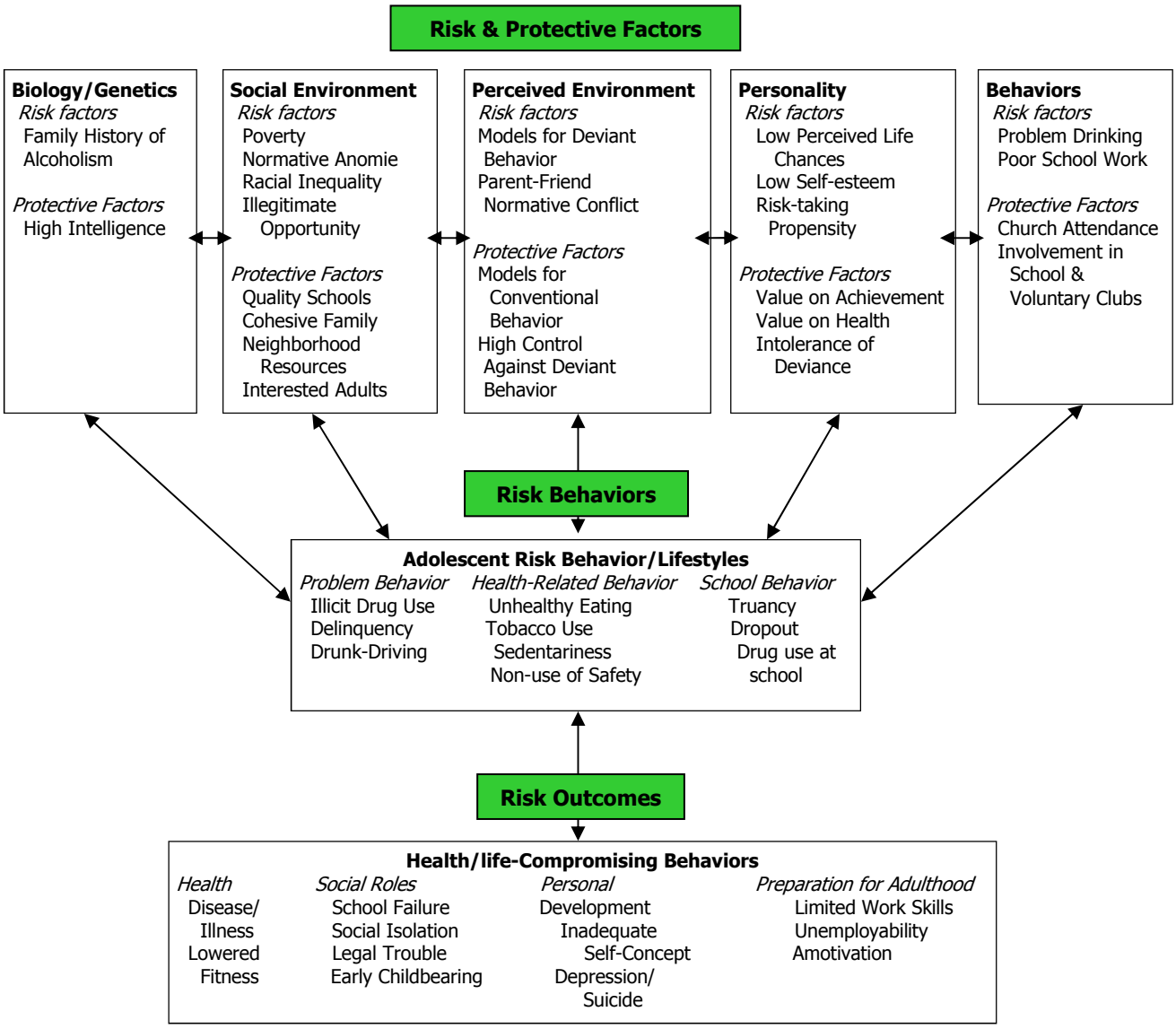
## Overview of Theoretical Framework

The over arching theme of the problem behavior theory states conforming or deviant behaviors are goal directed. The term *deviant* refers to an action of a person, not the person. Cultural and societal groups identify deviant behaviors that require control (Jessor et al., 1968). Using a systems approach, each domain is comprised of instigation (risk factors) and control structures (protective factors) acting together to produce a dynamic state of proneness toward or against deviant behaviors. Behaviors are conceptualized as health compromising or health risk behaviors (Jessor, 1998). The framework presents multiple domains illustrating the relationships of variables, and their influence on health outcomes (See Figure 1). This literature review focuses on risk and protective factors, risk behaviors, and one risk outcome (depression). Early childbearing is delineated in the risk outcome domain of the model, but no

related studies were retrieved using the specific search criteria, although it is very likely that they exist.

**Figure 1**

Interrelated Conceptual Domains of Risk Factors and Protective Factors




## Current Literature Regarding Risk and Protective Factors

Current research findings are diverse and include results based of adolescent participants from majority and minority ethnic and racial populations. There are publications from around the world, including Australia, Canada, China, Georgia, Turkey, South Korea, Sweden, Switzerland, and the US.

### Biology and Genetic

The risk and protective factors in the biology/genetics domain are family history of alcoholism and high intelligence (Jessor, 1998). No studies specific to the biology or genomics of problem behavior were found. However, increased funding in genetics research should produce new

studies. The terms addiction and substance abuse history might have captured more publications.

**Risk factors.** Two conflicting studies examined family history of alcoholism. In one study, students reporting parental alcohol abuse, were more likely to report suicide ideation (Park, Schepp, Jang, & Koo, 2006), yet the opposite was true in another study (Branstrom, Sjostrom, & Andreasson, 2007). Mixed findings about risk factors may result from operationalization of variables and from the truthfulness or social desirability of self-report.

**Protective factors.** Support for the protective effect of high intelligence was demonstrated by regression models predicting smoking behaviors when students reported grades of B or higher (Ellickson, Tucker, & Klein, 2008). High intelligence was also protective against suicide ideation (Park et al., 2006). Students with learning problems, as a reverse proxy for high intelligence, were more likely to be in the deviant cluster, than the normal or problem cluster (Bartlett, Holditch-Davis, Belyea, Halpern, & Beeber, 2006). Although these studies support high intelligence as a protective factor, consideration must be given to the operationalization of high intelligence. High intelligence may be protective, but it is difficult to improve this protective factor, except through school system improvements.

### Social Environment

The social environment provides the tools necessary for achievement of goals. Certain groups are more likely to achieve success based on social standing, resulting in pressure to achieve goals by any means possible, including illegitimate actions (Jessor et al., 1968).

**Risk factors.** The social environment risk factors include normative anomie, poverty, racial inequality, and illegitimate opportunity (Jessor, 1998). There were no studies examining normative anomie. Parental procurement of alcohol was associated with problem drinking, supporting illegitimate opportunity as a risk factor (Branstrom et al., 2007).

The literature on racial inequality must be interpreted with caution, as poverty and race are deeply intertwined, and both result in disproportionate ability to attain goals. Race may be used as a control variable or to limit samples to a particular group (Bennett, 2007; Fitzpatrick, Piko, & Miller, 2008). African American youth were more likely to change to a more deviant group or from a normal to a deviant group when compared with other races (Bartlett, et al., 2006). African American, Hispanic Americans, Pacific Islanders, and Asian Americans were more likely to be depressed or in the depression trajectory group when compared to Caucasians (Costello, Swendsen, Rose, & Dierker, 2008). Contrary to the premise of race as a risk factor, African American identity was protective against early onset of smoking (Wills, Resko, Ainette & Mendoza, 2004).

Studies exploring poverty also report mixed results. Consistent with the expected effect of a risk factor, poverty was associated with depressed mood (Costello, et al., 2008) and high socioeconomic status (SES), was protective against suicide ideation (Park et al., 2006). In contrast, poverty was not a risk factor in low SES adolescents who were more likely to fall into the normal behavior group, while adolescents from the middle SES were more likely to belong to the deviant behavior cluster (Bartlett et al., 2006). Studies using poverty as a control variable failed to show a relationship between problem drinking and marijuana use (Branstrom et al., 2007), or marijuana and tobacco use (Graves, Fernandez, Shelton, Frabutt, & Williford, 2005).

Mixed evidence of the effects of risk factors in the social environment on a broad array of adolescent behaviors was found. The mixed findings may be due to unmeasured social factors, distant to youth and therefore creating less of an effect. Variations in peer and neighborhood factors may also impact findings.

**Protective factors.** Quality schools, neighborhood resources, cohesive family, and interested adults are the protective factors of the social environment (Jessor, 1998). No studies of interested adults fit the search criteria. Quality schools and neighborhood resources were protective against use of alcohol, tobacco, and other drugs (ATOD) (Cleveland, Feinberg, Bontempo, & Greenberg, 2008). Family cohesion was protective against smoking and as family support decreased, the likelihood of smoking increased (Ellickson, et al., 2008). Family support/attachment decreased the odds of ATOD use (Cleveland, et al., 2008) and was protective against problems from drug and alcohol use (Vazsonyi, et al., 2008). Family cohesion was also protective against depressed mood (Costello et al., 2008) and suicide ideation (Eskin, Ertekin, Dereboy, & Demirkiran, 2007). Alternatively, studies found no relationship between parental support and problem behavior (Bartlett, et al., 2006; Bennett, 2007), or between family cohesion and suicide ideation or attempt (Fitzpatrick, et al., 2008).

Generally, social environment was a protective factor against ATOD use, deviance, problem drinking, depression, and suicide ideation. Although supporting cohesive families should protect adolescents, the premise that family influences become less as youth age, suggests that supporting both family and peer networks may be more effective in protecting adolescents.

## Perceived Environment

The perceived environment includes societal norms which guide behavior and are protective (Jessor et al., 1968). The level of exposure to deviant behaviors and the social support for or against behaviors has a direct effect on the likelihood of deviant behavior. A high prevalence of risky or deviant behaviors provides opportunity to engage in those behaviors (Jessor & Jessor, 1977).

**Risk factors.** Risk factors in the perceived environment include models for deviant behavior and parent-friend normative conflict (Jessor, 1998). Studies investigating parent-friend normative conflict were not found. Parent and peer models for deviant behavior were reported less often in younger adolescents, and increased in frequency in older youth (Wills et al., 2004). Parental criminality was associated with participation in problem behaviors (Bennett, 2007). Mixed results in relation to parental felony were reported, with increased tobacco use, but decreased marijuana use (Graves et al., 2005).

Substance use activities by important adults such as parents, teachers, or other mentors provide models of deviant behavior. Youth with parents who used ATOD were more likely to smoke cigarettes and/or use marijuana (Graves, et al., 2005), and smoking by important adults was predictive of continued smoking (Ellickson, et al., 2008). Norm-breaking friends also provide models for deviant behavior, and students reporting such friends were more likely to report problem drinking (Branstrom, et al., 2007; Cleveland, et al., 2008), use marijuana (Branstrom, et al., 2007), and smoke cigarettes (Ellickson, et al., 2008).

Overall, the literature supports the risk factor of models for deviant behavior in an array of problem behaviors. The findings that models for deviant behaviors increase in frequency as the adolescent ages is concerning considering that the protective effect of cohesive family decrease as youth draw away from the family unit.

**Protective factors.** The two protective factors of the perceived environment are models for conventional behavior, and high control against deviant behavior (Jessor, 1998). The search criteria found no studies of models for conventional behavior. High controls against deviant behaviors were protective against marijuana and cigarette use (Graves, et al., 2005), problem drinking (Branstrom, et al., 2007), ATOD use (Cleveland, et al., 2007), and smoking (Ellickson, et al., 2008). The current literature supports high controls against deviant behaviors as

protective in varied populations in relation to ATOD use and problem drinking. Studies investigating other risk behaviors related to this protective factor were not found.

### Personality

The personality system contains individual level variables, rather than social factors. Behavior is based on past socialization and current social system expectations (Jessor, et al., 1968). Youth with a tolerance for deviance, who get satisfaction from an activity without suffering negative consequences, are more likely to engage in deviant behavior (Jessor, et al., 1968; Jessor & Jessor, 1977).

**Risk factors.** Risk factors for this domain include low perceived life chances, low self-esteem, and risk-taking propensity (Jessor, 1998). Low perceived life chances predicted various problem behaviors (Vazsonyi, et al., 2008). Risk taking propensity was a predictor of ATOD use (Cleveland, et al., 2008) and has been associated with increased suicide ideation (Fitzpatrick, et al., 2008). Low self-esteem was predictive of both suicide ideation and attempts refine (Eskin, et al., 2007), while high self-esteem was protective against depressed mood (Costello, et al., 2008), suicide ideation (Fitzpatrick, et al., 2008; Park, et al., 2006), and suicide attempts (Fitzpatrick, et al., 2008).

Consistent with problem behavior theory, the literature supports risk factors in the personality domain as affecting behaviors, including problem behavior, depressed mood, ATOD use, suicide ideation, and suicide attempt. Individual level variables are very salient and have a constant daily presence for adolescents, who may consider themselves invincible (Elkind, 1984).

**Protective factors.** Protective factors in the personality domain include value on achievement, value on health, and intolerance of deviance (Jessor, 1998). Youths who reported value on health and value on achievement also reported adequate participation in physical activity and healthy eating habits (Boshoff, Dollman, & Magarey, 2007). Value on achievement was predictive of delayed onset of smoking (Wills, et al., 2004).

The literature has few examples specific to factors of the personality domain. It is possible that more examples of these studies exist, but the search criteria, which specified risk behaviors, did not adequately capture health-related behaviors.

### Behaviors

The behavior domain has risk and protective variables, and includes both acceptable and unacceptable behaviors. Actions that meet socially acceptable norms are appropriate for adolescents. Examples include church attendance and academic achievement (Jessor & Jessor, 1977).

**Risk factors.** The two risk factors in this domain include problem drinking and poor schoolwork (Jessor, 1998). No studies were found related to poor schoolwork. Support for problem drinking as an outcome, but not as a risk factor was reported. Problem drinking was predicted by various risk factors (Vazsonyi, et al., 2008) and by higher grade in school (Branstrom, et al., 2007). There is a dearth of research examining behavior domain risk factors, perhaps because problem drinking and poor schoolwork are usually outcome variables. Risk factors are often examined within larger models, thus making it difficult to identify studies specific to those variables.

**Protective factors.** The protective factors of the behavior system include church attendance, and involvement in school and voluntary clubs. Research in this area is limited. Religiosity has been negatively correlated with ATOD use (Feinberg, Ridenour, & Greenberg, 2007). Adolescents who felt connected to a spiritual community reported less suicide ideation, but

there was no relationship between religiosity and suicide ideation or attempt (Fitzpatrick, et al., 2008).

No literature was found regarding school and voluntary club involvement, and little evidence exists about church attendance as a protective factor. The two studies discussed were not specific to church attendance and the questions were limited in scope. Investigating both religiosity and spirituality may be a better approach, because youth may break away from traditional religion, yet remain spiritual.

## Current Literature Regarding Risk Behaviors

As the theory of problem behavior evolved, risk and protective factors were separated from the risk behaviors domain (see Figure 1). The basic tenant that risk behavior is age dependant remains unchanged (Jessor, 1998). For example, alcohol use is unacceptable for an 18 year old, but not for a 21 year old, even though both are adolescents (Jessor & Jessor, 1977).

### Problem Behavior

The problem behavior variables include illicit drug use, delinquency, and drunken driving (Jessor, 1998). No studies reported findings on drunk driving. Risk and protective factors predict the use of illicit drugs or problems from drug use (Vazsonyi, et al., 2008), and illicit drug use has been predicted by models that include risk factors. Various factors served as protective, but the effect strength of protective factors was less than that of risk factors (Cleveland, et al., 2007). Although posited in the problem behavior theory as affected by risk and protective factors, the literature focuses on illicit drug use as a risk factor for other behaviors. Concurrent illicit drug use was strong predictor of initiation of tobacco use (Wills, et al., 2004), increased the risk of depressed mood (Costello, et al., 2008), and was associated with suicide ideation (Park, et al., 2006). Youth who reported marijuana use had increased rates of delinquency (Branstrom, et al., 2007). Supporting the proposition that risk and protective factors combine to produce forces that affect behavior, risk and protective factors predicted 13% of the variance in one model and 10% of the variance in another model (Vazsonyi, et al., 2008).

Illicit drug use is well represented in the literature, as a behavior and as a risk factor for the co-occurrence of other risk behaviors and risk outcomes. It is interesting that the literature search identified studies from around the world pertaining to multiple risky behaviors, yet none addressed adolescent drunk driving. Perhaps the research on drunk driving exists in the adult literature and therefore was not captured by this search.

### Health-Related Behavior

Health-related behaviors include unhealthy eating, tobacco use, sedentariness, and non-use of safety belts (Jessor, 1998). The literature on unhealthy eating, sedentariness and non-use of safety belts yielded only two studies. One study addressed eating habits and physical activity related to obesity. Only 20% of the sample met the criteria for healthy eating and physical activity. The proportion of overweight children was 37.7% for males and 29.5% for females, with the expected percents of 23.3% and 19.8% respectively (Boshoff, et al., 2007). The study identified two protective factors, value on health and value on achievement, as positively related to healthy eating and adequate physical activity.

The second study examined health-related behaviors in two populations via the concept of heath-enhancing behaviors, defined as healthy eating, adequate physical activity, and the safety practices of seat belt use and bicycle helmet. More males than females were physically active, and more females than males wore helmets or seat belts. The model accounted for 45% of the variance in one sample and 41% of the variance in the other sample. A moderating effect of protective factors on risk factors was identified, suggesting that protective factors play

two roles: promoting health-enhancing behaviors and buffering risk factors (Turbin, et al., 2006).

Supporting the proposition that risk and protective factors combine to create proneness towards risk behaviors, a study found that early onset smokers reported higher levels of risk factors and lower levels of protective factors than other groups. Non-smokers reported the highest levels of protective factors and the lowest levels of risk factors. Intermediate and late onset smokers reported changes in risk and protective factors, with risk factors increasing and protective factors decreasing just prior to the onset of smoking. The strongest predictors of smoking onset were concurrent use of alcohol or marijuana (Wills, et al., 2004). Tobacco use was also predicted by models including individual, peer, and family risk and protective factors. The presence of positive societal factors was protective, but the strength of the protective factors was less than that of the risk factors (Cleveland, et al., 2007).

Tobacco use literature is abundant, and although listed in the overall theory as a health-related risk behavior (Jessor, 1998), tobacco use is more often investigated as a risk factor. Smoking has been associated with school difficulty and multiple problem behaviors. Adolescents who smoked were more likely to have peers who used tobacco, had problems at school, and an important adult in their life was a smoker (Ellickson, et al., 2008).

Tobacco use can be a risk factor or a risk outcome. Tobacco use has been associated with depressed mood (Costello, et al., 2008), and suicide ideation (Park, et al., 2006). The connection between tobacco use and impaired mental health is evident, as demonstrated by a 69% use rate among youth requiring mental health services (Graves, et al., 2005).

Overall, the literature on health-related behaviors supports the guiding theory that risk factors are associated with participation in unhealthy activity, and that protective factors are related to a decreased frequency of such behaviors. Few studies address non-use of safety belts, and it was surprising that only one study addressed unhealthy eating or sedentariness, especially considering the trends in adolescent obesity.

### School Behavior

The risky behaviors of the school behavior system include truancy, dropout, and drug use at school (Jessor, 1998). The literature does support the risk factor of problem drinking in association with truancy. Heavy drinkers of either sex were more likely to report truancy. However, the increased likelihood of truancy was limited to males when examining marijuana use (Branstrom, et al., 2007). Alternatively, early truancy predicted continued smoking (Ellickson, et al., 2008).

The literature on school behaviors reveals a general lack of current studies. It is possible that broader search criteria would identify additional studies. Most studies are school based. This raises questions about the lack respondents who have already dropped from school or were truant and who are likely to be even more adversely affected by risky behavior patterns.

### Current Literature Regarding Risk Outcomes

Risk outcomes, divided into four subcategories, include a variety of health/life compromising behaviors (Jessor, 1998). The only variable in any subcategory found in the literature search was depression/suicide. The theory posits that like risk behaviors, risk outcomes result from the complex interaction of risk and protective factors.

Trajectories of depressed mood were examined using group-based modeling. Overall, participants in groups reporting any type of depressed mood were more likely to be female, report ATOD use, and/or participate in delinquent behaviors. They were less likely to report the protective factors of family cohesion, high self-esteem, and high SES (Costello, et al., 2008).

Suicide ideation was more likely to be reported by females, although suicide attempt rate did not vary by gender. The predictors of suicide ideation or attempt included the risk factors of low grade point average, and low self-esteem. The only positive protective factor was family cohesion (Eskin, et al., 2007). Two additional predictors of suicide ideation include past history of treatment for depression and previous suicide attempts (Park, et al., 2006). In an African American sample suicide ideation percent by gender was higher for females (20.2%) than for males (13.3%), and females were three times more likely to report suicide attempts. Adolescents reporting either suicide ideation or attempt were more likely to report risk-taking propensity and the depression (Fitzpatrick, et al., 2008).

## Discussion

### Summary of the Literature Relating to Problem Behavior Theory

This review of fifteen studies from nine countries demonstrated that adolescent risk behaviors and subsequent risk outcomes are worldwide issues. This supports the proposition that, although modified by developmental and cultural variables, protective and risk factors affecting youth behavior exist everywhere. Most studies support the theory by findings consistent with and predicted by the model. In general, risk factors are associated with risk behaviors or risk outcomes, and protective factors result in decreased participation and improved risk outcomes. Additionally, risk factors exert a greater effect than protective factors, and protective factors mediate risk factors. The exceptions to the support for risk and protective factors included no support for church attendance, and mixed or non-support for a family history of alcoholism, poverty, racial inequality, cohesive families, and models for deviant behavior.

Strength of the current literature is demonstrated by findings consistent with theory predicted outcomes. Most studies had large numbers of participants and four studies used random sample selection. Six longitudinal studies allowed findings to be compared and created trajectories. A broad spectrum of youth from differing backgrounds and a variety of tools obtained multiple variations of variables and some instruments were translated and reverse translated.

Weaknesses of the current literature include studies using cross sectional studies and non-random samples. This limits the ability to generalize findings and to make causal statements. Most samples included school attending adolescents, leaving out those at greater risk for deviant behaviors and risk outcomes. In studies with urban, suburban, and rural populations, no comparisons by those factors were made. The variety of tools and operational definitions makes comparisons of studies, variables, and interpretation of outcomes difficult. Additionally, large predictive models make it difficult to assess the effect of one variable.

### Gaps in the Current Research Base

There are gaps in the literature, such as the lack of studies relating to interested adults, models for conventional behavior, parent-friend normative conflict, poor schoolwork, drunk driving, and involvement in schools or voluntary clubs. There are limited research findings with regard to racial inequality, church attendance, unhealthy eating, sedentariness, and non-use of seat belts. These may be true gaps or the search terms were too restrictive to capture all variables. It is interesting that the search criteria did not reveal studies related to adolescent driving behaviors and obesity.

Gaps also exist in sampling of populations at significantly higher risk, such as those who have dropped out of school, are incarcerated, or are homeless. Those youth have higher rates of risk behaviors and suffer more devastating effects from risk outcomes. They may also be affected differently by risk and protective factors when compared to the general population.

### Limitations

This literature review has limitations including the time limit of the previous 5 years. Without the time limit additional studies would have been identified. However, the limited time period demonstrates the most current studies. Intervention models and middle school aged adolescent were not included, and may have revealed valuable information. Not all databases were searched, excluding studies from other disciplines. Additional search terms, such as unintentional injury, obesity, and physical activity might have captured non-use of seatbelts, drunk driving, unhealthy eating behaviors, and sedentariness. Key word searching does not identify all pertinent studies, depending on titles.

### Suggestions for Future Research

Clearly, there are opportunities for future studies to test the problem behavior theory. To begin, studies investigating the identified gaps need to be completed. Several studies conclude, and this author agrees, that future research should carefully consider the culture and society the sample represents. Replication of studies from one culture to another could support the theory, or suggest potential modifications required by cultural norms. Future research should strive to develop interventions and apply findings in actual practice settings.

## Conclusion

The problem behavior theory has been studied and tested for several decades. Changes and corrections to the propositions have resulted in a model that appears to be applicable worldwide. Yet more work is needed. Knowing about the effects of risk and protective factors is just touching the surface of the problem and begins to supplying the knowledge needed to develop interventions that change adolescent behaviors and ultimately their lives. Designing interventions specific to the adolescent population, which result in changes to the risk outcomes in a positive direction is the desired end result. Public health can be positively affected by intervening to decrease the risky life style choices that are built on the behavioral patterns of youth. Programs delivered during the developmental period when the establishment lifelong healthy or unhealthy patterns occur can have a powerful positive effect on individual and population health for many years to come.

## References


Bartlett, R., Holditch-Davis, D., Belyea, M., Halpern, C.T., & Beeber, L. (2006). Risk and protection in the development of problem behaviors in adolescents. *Research in Nursing and Health, 29*, 607-621.

Bennett, M.D. (2007). Racial socialization and ethnic identity: Do they offer protection against problem behaviors for African American youth? *Journal of Human Behavior in the Social Environment, 15*(2-3), 137-161.

Boshoff, K., Dollman, J., & Magarey, A. (2007). An investigation into the protective factors for overweight among low socio-economic status children. *Health Promotion Journal of Australia, 18*(2), 135-142.

Branstrom, R., Sjostrom, E., & Andreasson, S. (2007). Individual, group and community risk and protective factors for alcohol and drug use among Swedish adolescents. *European Journal of Public Health, 18*(1), 12-18.

Centers for Disease Control and Prevention. (2008). 2007 National Youth Risk Behavior Survey overview. Retrieved from: http://www.cdc.gov/HealthyYouth/yrbs/pdf/yrbs07_us_overview.pdf

Cleveland, M.J., Feinberg, M.E., Bontempo, D.E., & Greenberg, M.T. (2008). The role of risk and protective factors in substance use across adolescence. *Journal of Adolescent Health, 43,* 157-164.

Costello, D.M., Swendsen, J., Rose, J.S., & Dierker, L.C. (2008). Risk and protective factors associated with trajectories of depressed mood from adolescence to early adulthood. *Journal of Consulting and Clinical Psychology, 76*(2), 173-183.

Elkind, D. (1984). Teenage Thinking: Implications for Health Care. *Pediatric Nursing, 10*, 383-385.

Ellickson, P.L., Tucker, J.S., & Klein, D.J. (2008). Reducing early smokers' risk for future smoking and other problem behaviors: Insights from a five-year longitudinal study. *Journal of Adolescent Health, 43,* 394-400.

Eskin, M., Ertekin, K., Dereboy, C., & Demirkiran, F. (2007). Risk factors for and protective factors against adolescent suicidal behavior in Turkey. *Crisis 2007, 28*(3), 131-139.

Feinberg, M.E., Ridenour, T.A., & Greenberg, M.T. (2007). Aggregating indices of risk and protection for adolescent behavior problems: the Communities That Care Youth Survey. *Journal of Adolescent Health, 40,* 506-513.

Fitzpatrick, K.M., Piko, B.F., & Miller, E. (2008). Suicide ideation and attempts among low-income African American adolescents. *Suicide & Life-Threatening Behavior, 38*(5), 552-563.

Graves, K.N., Fernandez, M.E., Shelton, T.L., Frabutt, J.M., & Williford, A.P. (2005). Risk and protective factors associated with alcohol, cigarette, and marijuana use during adolescence. *Journal of Youth and Adolescence, 34*(4), 379-387.

Jessor, R. (1998). *New perspectives on adolescent risk behaviors*. Cambridge, MA: Cambridge University Press.

Jessor, R., Graves, T.D., Hanson, R.C., & Jessor, S.L. (1968). *Society, personality, and deviant behavior: A study of a tri-ethnic community*. New York: Holt, Rinehart and Winston, Inc.

Jessor, R., & Jessor, S.L. (1977). *Problem behavior and psychosocial development: A longitudinal study of youth.* New York: Academic Press.

Park, H.S., Schepp, K.G., Jang, E.H., & Koo, H.Y. (2006). Predictors of suicidal ideation among high school students by gender in South Korea. *The Journal of School Health, 76*(5), 181-188.

Turbin, M.S., Jessor, R., Costa, F.M., Dong, Q., Zhang, H., & Wang, C. (2006). Protective and risk factors in health-enhancing behavior among adolescents in China and the United States: Does social context matter? *Health Psychology, 24*(4), 445-454.

Vazsonyi, A.T., Chen, P., Young, M., Jenkins, D., Browder, S. Kahumosku, E., et al. (2008). A test of Jessor's problem behavior theory in a Eurasian and a Western European developmental context. *Journal of Adolescent Health, 43,* 555-564.

Wills, T.A., Resko, J.A., Ainette, M.G., & Mendoza, D. (2004). Smoking onset in adolescence: A person-centered analysis with time-varying predictors. *Health Psychology, 23*(2), 158-167.

World Health Organization. (2008). 10 facts on adolescent health. Retrieved from http://www.who.int/features/factfiles/adolescent_health/en/index.html

World Health Organization. (2009). Adolescent health. Retrieved from http://www.who.int/whr/2002/annex/en/index.html

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# Developing a Life Skills Evaluation Tool for Assessing Children Ages 9-12

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# Developing a Life Skills Evaluation Tool for Assessing Children Ages 9-12

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**Abstract:** Efforts that attend to the developmental needs of children, enhance their capacity to learn, and support their potential for becoming successful, have tremendous merit. Therefore, it is critical that steps are taken to evaluate the effectiveness of such endeavors. The purpose of this study was to create and validate a life skill outcomes instrument for use in extension youth programs. This instrument validation study utilized both quantitative and qualitative methodologies to establish the validity and reliability of a life skills instrument for nine to twelve year olds. The data collected from 111 participants suggests that the instrument is both valid and reliable for the intended age group. Study results, limitations, and ideas for future research are discussed.

## Introduction

The 4-H Youth Development Program is a dynamic, out of school program that provides opportunities to support the developmental growth of youth ages eight to eighteen. The 4-H program is administered nationally by the United States Department of Agriculture, and locally by the Cooperative Extension Systems of land grant universities in each state and territory of the United States. It is estimated that 5.9 million youth participated in 4-H in 2007, making it the largest out of school youth development program in the world (4-H National Headquarters, 2001; Lerner, et al., 2008).

Governmental and other funding agencies frequently require youth service entities such as 4-H to measure and monitor the impact of their programs. The dearth of valid and reliable instruments for assessing the outcomes of these program make it difficult to achieve these requirements (National 4-H Headquarters, 2001). The lack of available instruments can impede the work of program administrators as they seek the data necessary to justify the continued promotion, funding and implementation of youth development programs (Bailey & Deen, 2002; Pittman & Cahill, 1992).

The goal of our study was to address the scarcity of instruments appropriate for assessing life skill outcomes of children nine to twelve participating in youth extension programs. Further, we sought to determine if items extracted from a web-based item repository could be effectively

used to create such an instrument. We utilized processes of validation and applied rigorous testing to assure our instrument effectively and consistently assess the targeted outcomes. We balanced our aspirations for quality with the desire to assure our instrument was a practical and useful tool that youth development program administrators would consider for use when assessing program effectiveness.

We begin the presentation of our research with a discussion of the literature related to the history and development of life skills, the life skills evaluation tools that have been used to assess this process, and an over view of the WSU Cooperative Extension life skills evaluation system. We will then present our research questions and methodology, followed by a presentation of our analysis. We conclude our report with a discussion of implications, limitations, and further research suggestions.

## Life Skill Development

Imbedded within the field of Positive Youth Development (PYD) is the vocabulary of *life skills development*. Life skills are defined as "skills that help an individual to be successful in living a productive and satisfying life" (Hendricks, 1996, p.4). The goals of many youth programs include creating opportunities for participants to experience the practical application of life skills so they may develop in these areas and become more readily able to utilize the skills later in life. For example, the National Cooperative Extension System, has developed a life skills model organized around the "4-H's" which are Head, Heart, Hands, and Health. These categories are embedded in the "Targeting Life Skills Model" as developed by Hendricks (1996) of the Iowa Sate University Cooperative Extension Service. These were developed with the notion that youth can be engaged in a wide range of beneficial and productive activities that encompass several life skills; it is the job of the practitioner to determine which life skills are most releveant and salient, and then evaluate their achievement accordingly (Hendricks, 1996).

## Life Skills Evaluation Tools

Many organizations engage in program evaluation to determine if experiential based learning programs targeting the life skill development of youth have achieved their goals. However, to effectively evaluate the programs requires methods and tools with established reliability and validity. Due to the nature of our instrument development process we determined it to be prudent for us to review the literature that communicate how the validity and reliability has been established on life skill development assessment tools and especially those targeting children ages 12 and younger.

The American Camp Association (ACA) is an organization developed as a conduit for professionals who manage youth camps to collaborate, share knowledge, and promote child development through enhancing the quality of their camp experiences. The ACA provides a battery of evaluation tools to measure seven outcomes including: friendship skills, independence, teamwork, family citizenship, perceived competence, interest in exploration, and responsibility (American Camping Association, 2009). Three types of surveys were developed by ACA to measure intended outcomes. The "Camper Learning" survey was developed for campers' age 6-9 years of age and includes 14 questions measuring seven outcomes on a four-point Likert scale. The alpha reliability coefficient was .85. Random effects analysis of variance revealed no significant "interviewer" variations.

The "Basic Camp Outcomes" surveys were developed for campers ages 10-17. Seven surveys with 6 to 14 items were developed to measure each of the seven targeted camp experiences outcomes. Camp administrators can mix and match 6-14 of the indicators based on their programs and the areas of youth development they are seeking to assess. The seven

instruments, which participants respond to on a five-point Likert scale, have established reliability coefficients exceeding .90, and all item-to-total correlations greater than .50.

The "Detailed Outcomes" surveys are also composed of seven surveys that can be mixed and matched based on the outcomes that are to be assessed. These surveys were developed to measure both outcome gains resulting from camp experiences as well as how much of that gain is due specifically to camp. These six-point Likert scale inventories contain 6-14 indicators distributed across two subscales. The instrument developers report alpha reliability coefficients ranging from .87 to .93. Criterion-related evidence of validity based on the matrix of correlations among the scale scores supported the use of these scales for their intended purpose (Statistical Information: Youth Camp Outcomes Questionaire, 2009).

Chambers and Johnston (2001) conducted a study to examine the developmental differences in childrens' use of rating scales. The study investigated the relationship between the developmental abilities in children ages 8-11 and their responses on self-report life skills evaluation tool. This study used the web-based Life Skills Evaluation System created by Washington State Cooperative Extension System and examined the validity of the life skill outcome indicators on children in grades three through five. The researchers recruited 65 youth attending a four-day 4-H camp. The evaluation tool consisted of 31 life skill indicators selected from the respository that addressed the following six life skills: decision making, wise use of resources, communication, accepting differences, healthy lifestyle choices, and self-responsibility.

Due to the perceived complexity of the evaluation for children ages 8-11, the system's five-point Likert scale was reduced to a three-point scale. Research on the developmental differences of children ages 5-12 use of rating scales, reports that the younger children tend to report at higher extremes than older children (Chambers & Johnston, 2001).

The researchers (Chambers & Johnston, 2001) also chose to conduct a separate pre-test and post-test prior to and following the camp program. The web-based evaluation tool was orginally designed to administer the pre-test prior to the program and post-test following the program completion (Bailey & Deen, 2002). However, the researchers chose this method of adminstration due to "the limited abstract reasoning skills of the younger age group, grades three to five (8 to 11)" (Loeser, Bailey, Benson, & Deen, 2004; Piaget, 2002). Their analysis revealed a Cronbach's alpha internal reliability of .81 indicating a good level of instrument reliability.

The research on life skills instruments use with children six to seventeen years of age indicate that the tools can adequately measure life skill outcomes on youth. However, there are limitations to relying exclusively on quantiative analysis for investigating the reliability and validity of these tools. Further, the results from these tools should be considered tentatively when investigating program delivery, and making modifications to optimize programs to enhance life skill development in participants nine to twelve. Therefore, in our study we utilized mixed methodologies to examine the instrument we developed to assess life skill development of nine to twelve year old youth. The instrument was composed of items extracted from a bank of items accessible through a web-based repository.

## Overview of the Web-based Life Skills Evaluation System

Washington State Cooperative Extension was award a five-year State Strengthening Grant from the United Sates Department of Agriculture. These grants were awarded to:

1) Improve the statewide capacity to support community-based programs for children, youth, and families at risk; and

2) improve the quality and quantity of comprehensive community-based programs for children, youth, and families at risk.

In an effort to evaluate the effectiveness of the grant award recipients meeting the goals specified by the grant, Washington State Cooperative Extension created the Life Skills Evaluation System, a repository of life skill outcome indictors that can be used to assess life skill development of a range of developmental levels and program engagement (Bailey & Deen, 2002).

The evaluation system repository was developed to provide program managers and evaluators access to items with established validity that could be used to develop program evaluation instruments. For example, the system provides a means for developing an instrument that could be used to test the assumption that Cooperative Extension 4-H Youth Development and Family Living programs teach life skills. Similarly, the system offers evaluators and researchers of 4-H programs an additional resource for creating valid instruments to measure growth in life skills. We capitalized on the availability and content of the evaluation system to develop an instrument to evaluate the life skill development of children 9-12 years old participating in 4-H programs.

## Establishing validity and reliability of the system

Bailey and Deen (2002) established the validity of the life skill outcome indicators in the repository on two levels. First, during two regional program trainings Cooperative Extension personnel were asked to provide feedback on the items and suggestions on the feasibility and usefulness of the system for creating a range of instruments to assess life skill development of 4-H participants. Second, they utilized a peer-review process by Cooperative Extension specialists in three states outside Washington to evaluate assessment items and the corresponding system.

To establish the reliability of the instruments created by selecting indicators from the repository Bailey and Deen (2002) then conducted a pilot study which included nine Cooperative Extension personnel from Washington State who volunteered to administer a system-generated instrument with one of their family or youth programs. The Cronbach's alpha was applied to calculate the internal consistency of each of the life skill instruments. The reliability calculations produced results in the, "ranges from .75 to .91, indicating acceptable and high levels of internal consistency" (Bailey & Deen, 2002, p.145). The results of these tests reveal the indicators selected from the repository can be assembled to form reliable instruments.

The reliability and validity of the indicators in the repository have been established using participants ages twelve and older. Our instrument validation study extends this work by selecting indicators from the repository and developing a life skill development instrument for use with participants' ages nine to twelve years old. The lack of research on younger participants (below the age of 12 years) provides justification for our research. Further, the likely involvement of nine to twelve year olds in 4-H programming provides additional justification for developing instruments that could be used to assess this group on the life skill development. Thus, the dearth of available instruments for assessing the life skill development of pre-adolescents and the need to measure program impact on this population provided the warrant for our research.

## Methods

### Research Questions

To study the development of life skills of students, nine to twelve years old, it is necessary to develop a valid and reliable instrument that will accurately assess participant perceptions of their competency on targeted life skill indicators. As previously discussed, the indicators contained within the Washington State University's (WSU) web-based Life Skills Evaluation

System repository were originally developed to assess life skill outcomes for participants age 12 and older. Therefore, the validity and reliability of the indicators and subscales require further examination to justify the use of these indicators with participants younger than 12 years of age. The goal of our research was to establish the validity and reliability of a life skills development instrument for use with nine to twelve year old children. The following research questions guided this investigation:

- *What is the reliability of a life skills instrument created using the Life Skills Evaluation System among students age nine to twelve?*
- *How did the individual items contribute to the overall reliability of the instrument?*
- *What do student interviews responses to Likert scale items contained within our life skills instrument reveal about the validity of the items for this age group?*

## Data Collection and Analysis Methodology

**Participants and recruitment.** University of Idaho Extension, Ada County, conducts 4-H programming for children ages 6-18. One of the modes of program delivery is through day camps from the months of June to August. Day camps vary from one three-hour session to three six-hour sessions. The intent for 4-H programming is to provide participants with activities that teach them life skills. The activities can be varied though out the year and are facilitated by instructors that have varying levels of education and experiences with children. Therefore, life skills in 4-H are implicitly taught through the participants experience. It is difficult to determine which specific life skills participants will gain at each individual day camp. These day camps provided the ideal setting and age group of participants to conduct this instrument validation study as their content and program delivery is reflective of the common 4-H program experience.

All participants in this study were selected from nine 4-H summer day camps. There were a total of 111 participants, 32% were age's eight to ten and 52% of the participants were eleven to thirteen years of age ($M = 10.77$, $SD = 1.29$). The ethnicities of the participants were as follows: 70% Caucasian, 9% racially mixed, 5% Hispanic, 5% American Indian, and 4% Asian American with 7% of the participants left the section blank. Participants reported their home location which includes: 53% living in a community with a population of greater than 50, 000, 26% less than 50,000, 5% rural, non-farm community, and 14% farm community. Given this sample diversity and age demographics, we determined it was appropriate for the intent of this study and proceeded with our analysis under the assumption that our participants were reflective of the target population.

## Methods

The primary goal of our research was to establish the reliability and validity of a life skills instrument to be used with youth age nine to twelve. We conducted a cross sectional study using a combination of methodologies to gather both quantitative and qualitative data. We chose to use a combination of methodologies for the purposes of triangulation which, "seeks convergence, corroboration, and correspondence of results' across the different methods and will be used to increase the validity of constructs and inquiry results by counterbalancing known method biases and limitations" (Green, 2001, pgs. 252-253).

We conducted interviews with participants to triangulate results to establish the validity of our selected items. Of particular importance was the need to determine the readability of the items for the participating age group and to determine if the statements were comprehendible and accurately interpreted by the participants. We had decided it was necessary to gather the data to provide direction for making adaptations to the instrument's indicators, open-ended questions, and/or instrument format based on the readability of the items, the participants' interpretations of the indicators, and reliability coefficient of each indicator.

## Procedure

**Instrument Development.** We constructed two life skill development instruments using the repository of life skill outcome indicators available from the WSU Cooperative Extension Life Skills Evaluation System. From the evaluation system we identified and extracted 30 life skill outcome indicators that were specifically designed to assess individual development on the following six life skills: communication, leadership, useful/marketable skills, self-responsibility, critical thinking, and positive identity. The validity of these items had not been established for our targeted population of nine to twelve year old participants.

We split the 30 indicators in such a manner to create two instruments: Form A and Form B. Each form had fifteen indictors that measured the six life skills. The instrument asked the participants to respond to indicators using a four point Likert scale ranging from "NO" to "YES." Item statements were similar to this one, "I can organize a group to reach its goals" which is intended to assess participants' leadership life skill. To make the Likert scale concrete and developmentally appropriate for the targeted population we utilized a combination of icons and words to represent the numerical scale.

We sought to maintain a high level of consistency in the construction of the two forms by selecting an even number of indicators to each of the six life skills. Rather than grouping the indicators by life skill, we varied the indicators to reduce the possibility of participant trend responses. The full Form A instrument can be found in the Appendix.

**Establishing Consent and Assent.** We made arrangements with the 4-H summer camps director to mail consent/assent forms to the participants and their parents. Two weeks prior to start of the camps a reminder postcard was routinely sent to families who had enrolled a child in one of the camps which included information about the consent/assent documents.

Phone calls were made a day or two prior to the day camp to remind parents to return the consent/assent forms and to answer any questions they had about the life skills survey and the study. We were present the morning of each day camp to collect consent/assent forms and again answer any questions parents and children had about the project. We documented on a roster the participants who returned the consent and assent forms and were then eligible to participate in the evaluation.

**Data Collection.** Administration of the different forms was planned according to the number of participants based on the registration roster for each day camp so as to have approximately the same number of participants using the test for both forms. When data collection was completed 111 questionnaires were completed with 53 participants completing Form A and 58 completing Form B.

We used a retrospective pre-test and post-test which allowed us to calculate the reliability coefficient of the instrument based on a test-retest methodology. We took this approach as the camps were taking place at different times and for different durations. The approach simplified that data collection and minimized impact on the families involved in our project. To assure that the participants were informed, we directly administered the instrument at the day camps, described its purpose, and answered any questions participants asked about the process of completing the instrument. Participants were directed to first read the life skill indicator, to reflect on the life skill indicator prior to participating in the day camps and to fill out the section that reflects their level of having that life skill. Then they were instructed to reflect on their experience at their day camp and fill out the section indicating the level of life skill acquisition after having participated in the day camp. In an effort to ensure instrument completion accuracy, we monitored participants as they completed the instrument and reviewed each

completed document as they were returned. Participants were given as much time as they needed to complete the instrument.

To triangulate the data, we conducted brief, five-minute interviews with consenting participants using a self-made life skills evaluation interview protocol/script (see Appendix). Participant interviews were conducted immediately following participants completing the questionnaire. We conducted one to three interviews on the final day of each day camp. Interviews were kept short from two to five minutes in length and were conducted in a separate location from their peers with a day camp staff member present for observation. There were 17 participants interviewed, nine females and eight males. Their ages included: One nine year old, seven ten year olds, two eleven year olds, and seven twelve year olds. Three nine year old females and one nine year old male signed the consent form for interviewing but when we asked them to participate they declined. Two audio recordings, one on a nine year old female and one on a 10 year old male, were lost due to recording interference from the weather at the River Camp.

We designed the interview questions to expose the participants' understanding of the vocabulary and concepts present in the existing indicators of the survey, specifically those that may have been difficult for participants of this age group to comprehend. Of primary concern were the younger participants' perceptions of vocabulary and concepts associated with the life skill terms: accurate, compare, leadership, contribute, commitments, following through on commitments, knowing sometimes one thing is better than another, settling disagreements, and organizing a group to reach a common goal. Determining the extent to which the participants understood these vocabulary and concepts is a critical step in establishing indicator validity.

**Data Analysis.** The quantitative portion in data analysis was conducted to determine the reliability coefficient on the instrument's life skills indicators. Therefore we chose to utilize the ANOVA to determine similarities between Forms A and B. To complete our quantitative analysis we calculated paired samples t-test to determine change to life skill perspective using the pre and post tests.

We selected two procedures to examine our quantitative data. The first was to compile and analyze the three open ended questions on our instrument to determine if the participants' answers provided evidence of life skill acquisition or other data indicating understanding useful to determining instrument validity. The second procedure involved coding the transcribed interviews conducted at each day camp with consenting participants. We coded the transcripts both deductively and inductively seeking to expose evidence of the participants' understandings of the vocabulary and concepts present in the instrument. We analyzed the data from the transcriptions of the 17 semi-structured interviews by creating a comparison chart that allowed us to readily expose emergent trends. We created this chart to identify which participants did or did not understand the vocabulary and/or concepts. To further tease apart the data we developed a color coding system to categorize participants as having a good understanding (yellow), an approximate understanding (green), or no understanding evident (blue).

Next, we quantified the coded data to help identify trends both by age of participants and by concepts of the participant's level of understandings of the vocabulary and concepts. Our quantification process was based on the scores we assigned to the participants based on their levels of understanding. For example, we scored the responses of the participants with a clear understanding with a "3", those with an approaching understanding received a "2", and no understanding were scored as "1". To rate the participants' overall level of understanding of the vocabulary and concepts, we calculated the percentage of participants identified for each of the three categories for each of our codes.

# Results

## Data Entry and Conditioning

We have chosen to use the words "indicator" and "item" interchangeably for the following sections for descriptive analysis of the data. To begin our analysis we entered our collected data into a computer based statistical program to perform our instrument reliability and item analysis calculations. We then conditioned the data which included identifying eliminating incomplete surveys and those in which the participants' scores were identical from pre-test to post-test. The resulting working sample sizes were $N$= 41 for Form A, and $N$= 47 for Form B.

## Instrument Reliability

Our first research question asked: *What was the reliability of a life skills instrument created using the Life Skills Evaluation System among students ages nine to twelve?* To answer this question we conducted a Cronbach's alpha reliability analysis on both Form A and Form B instruments. We used the post-test of each form for our calculations as it could be argued that the post-test is more likely to be representative of the participants' life-skill development than the retrospective pre-tests. The reliability analysis of Form A, $N$ = 41, revealed a Cronbach's coefficient alpha of .89 and for Form B, $N$ = 47, our Cronbach's coefficient alpha analysis of .90.

We used a repeated measures ANOVA to determine if there was a significant difference in the participants' responses from pre-test to post-test and to determine if there was a differential response between the participants using Form A and Form B. We entered the pre-test and post-test scores as the measured variable and the Form groups as the factor variable. The results indicated that there was a significant difference from pre-test to post test for time, $F(1, 73) = 16.97$, $p < .01$, indicating that the participant answers changed from pre to post-test. The between groups analysis was not significant indicating that the participants did not differentially respond to the two forms of the instrument from pre-test to post test.

To determine if there were significant differences in the participants' response to the life skill items on the two forms we utilized an independent samples t-test with the pre-test scores as the variable and Form group as sample grouping. Our analysis failed to show significance which indicates that the participants answered similarly on Form A and Form B. This provides evidence that the participants were consistent in how they answered the instrument items and indicates that the two forms were similar in their assessment of life skills.

## Item Contribution

Our second research question asked: *How did the individual items contribute to the overall reliability of the instrument?* To answer this question we conducted a correlation analysis of the post-tests for both questionnaire forms to calculate the point-biserial correlation values. We used these values to conduct our item analysis such as the contribution of each item to the overall reliability of the instrument.

Correlation analysis of Form A shows that the point-biserial correlation values (Threshold for significance $N$ = 41 is r >.308). There were two point-biserial values below the critical value, UMS2 and UMS4. Our content analysis of these items revealed them to have value in this life skill tool if the constructs of "useful/marketable skills" were explicitly taught to participants. Due to the items point-biserial values below the critical value, they could be removed from future assessments but would not significantly reduce the reliability of the instrument. The remaining items were all above the point-biserial critical value and therefore were answered consistent.

## Table 1

*The Item Total Statistics for Form A*

| Item Code | M | SD | Point Biserial Correlations (*r*) | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| P16 | 3.63 | .59 | .35 | .89 |
| UMS2 | 3.61 | .55 | .26 | .89 |
| C1 | 2.95 | 1.11 | .81 | .87 |
| UMS4 | 3.61 | .68 | .28 | .89 |
| UMS5 | 2.87 | .91 | .56 | .88 |
| C2 | 3.58 | .68 | .44 | .89 |
| SR2 | 3.18 | .98 | .79 | .87 |
| L1 | 2.95 | 1.21 | .64 | .88 |
| CT1 | 3.00 | 1.12 | .64 | .88 |
| CT2 | 2.95 | 1.06 | .64 | .88 |
| CT4 | 3.37 | .85 | .69 | .88 |
| CT7 | 3.39 | .64 | .50 | .89 |
| PI1 | 3.42 | .89 | .60 | .88 |
| PI5 | 3.03 | 1.10 | .64 | .88 |
| SR4 | 3.55 | .69 | .44 | .89 |

Our calculations of the point-biserial correlation values for Form B are presented in Table 2 (Threshold for significance $N = 47$ is $r > .308$). There were no point-biserial values significantly low enough to be concerned with removing indicators from Form B of the instrument. Therefore each item contributes to the overall effectiveness to measure those constructs by this instrument.

## Table 2

*The Item Total Statistics for Form B*

| Item Code | M | SD | Point Biserial Correlations (*r*) | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| C3 | 3.20 | 1.01 | .70 | .89 |
| C4 | 3.51 | .64 | .56 | .89 |
| L1 | 3.24 | .94 | .68 | .89 |
| L3 | 3.24 | .97 | .69 | .89 |
| UMS1 | 3.41 | .81 | .83 | .88 |
| UMS3 | 3.59 | .67 | .61 | .89 |
| UMS6 | 3.15 | 1.22 | .57 | .90 |
| SR1 | 3.49 | .75 | .67 | .89 |
| SR3 | 3.76 | .49 | .35 | .90 |
| CT3 | 3.59 | .63 | .46 | .89 |
| CT5 | 3.54 | .67 | .73 | .89 |
| CT6 | 3.54 | .74 | .46 | .89 |
| PI2 | 3.66 | .62 | .55 | .89 |
| PI3 | 3.59 | .59 | .54 | .89 |
| PI4 | 3.39 | .80 | .35 | .90 |

## Open Ended Question Responses

Our third research question asked: *What do student open ended questions responses to their camp experience reveal about their applications of Life Skills?* To answer this question we examined the transcripts of the participant responses to our interview seeking indicators of understanding of life skill development and to expose evidence indicating they comprehended the survey items.

We began our analysis by examining the participants' responses to the three open-ended statements of our instrument. Again, the purpose of these statements was to glean further information from the participants about what they have learned and would like to see improved in the 4-H Day Camps. Typically, administrators of the 4-H Day Camps use the participants' responses to guide program delivery and content for the following year. For the purposes of instrument validation, we first examined the data to determine if participants responded to the open-ended questions, and if they had we then coded their responses for indicators of life skills content.

Out of the 111 questionnaires, 16% of the participants did not write any responses or wrote "none", "nothing", and/or "I don't know" to all three open-ended items. Twenty-four percent of the participants responded to all the statements. The first statement, "The most important thing I have gained from attending the 4-H Day Camps is…" had a 77% response rate. The second statement, "The one thing, if anything, I would change about the 4-H Day Camps is…" had a 50% response rate. The third statement, "Other comments I would like to make are…" had a 42% response rate. The variation in responses suggests that the participants' may have perceived these items from a range of perspectives.

Although we received responses to all three open-ended questions, participant responses to the first statement, "The most important thing I have gained from attending the 4-H Day Camps is…" were revealed to be the best evidence for life skill development. To communicate this finding we selected some representative responses to this question reflective of this condition. In addition, we matched the participant responses to the open ended question that to one of our life skills items and the corresponding life skill. Representative samples of these results are presented in Table 3.

**Table 3**

*Participant Responses and the Corresponding Life Skill Indicators*

| **Participant Response** | **Life Skill Item<br>Corresponding Life Skill in Parentheses** |
|---|---|
| "How to be patient catching fish isn't easy" | I work out problems as they are presented to me. (Useful/Marketable Skills) |
| "Learning to work with others" | I contribute as a team member. (Useful/Marketable Skills) |
| "Following directions!" | I follow instructions as they are given to me. (Positive Identity) |
| "Cooking skills & Social skills" | I enjoy using my skills. (Positive Identity) |
| The thought everything I do may decide the fate of the world." | I do things for myself and for others. (Positive Identity) |
| "I can make a big difference." | I have control over my own personal goals/future. (Self-Responsibility) |

The examination of our participants' responses to the open-ended survey items provides further support for the developmental appropriateness of the Likert scale items. Further, these responses provide additional empirical evidence of the participants' applications and acquisition of Life Skills.

## Participant Interviews Responses

Our fourth research question asked: *What do student interviews responses to Likert scale items contained within my life skills instrument reveal about the validity of the items for this age group?* To answer this question we coded the participants' responses to interview questions in an effort to expose evidence of vocabulary and concepts that may have been problematic such as challenging to comprehend or misinterpreted. Our results are first presented by age level of participant and then by cumulative response to the vocabulary associated with the seven life skill concepts.

**Response by Age.** Six out of the seven twelve year old participants understood all of the vocabulary and concepts and were able to provide rich description of them when asked to clarify the meanings of the terms or ideas. The ten and eleven year olds varied in how descriptive they were in their responses, however, four out of the seven of the ten year old participants from this group provided responses that indicated understandings of the vocabulary and concepts. Both of the eleven year olds provided evidence of understanding the vocabulary and concepts with a few exceptions. One of our eleven year old participants did not know what "accurate" meant and the other eleven year old participant had difficulty providing an example of "organizing a group to reach a goal." The following excerpt, an interaction with an 11 year old female 4-H Day Camp participant, provides an account of the kinds of interactions that took place during the interviews:

> Interviewer: "Have you ever organized a group to reach a goal?"
> Participant 8: "Um, I think so?"
> Interviewer: "How did you do that?"
> Participant 8: Participant shrugged shoulders.
> Interviewer: "Have you ever seen someone organize a group of people to reach a goal?"
> Participant 8: "Yes."
> Interviewer: "And what kinds of skills, what kinds of things do you do to get everybody to reach a goal?"
> Participant 8: "Have the same opportunity (…) practice being with a lot of kids."

This interaction may suggest that the participant is not clear about what is involved when organizing a group. In contrast, a nine year old male participant communicated understanding of "leadership" and "contribute" of the nine vocabulary and concepts. The following excerpt provides the documentation for understanding of leadership:

> Interviewer: "Think of someone that is a great leader. It can be you, a friend, a President, anyone. What makes them a good leader? How do you know they are a great leader?"
> Participant 9: "My mom and my dad because they are always helping me."
> Interviewer: "Are there other ways that can make someone a good leader?"
> Participant 9: "Like telling what not to do and what to do."

> The following excerpt provides the documentation for understanding of contribute:
>
> Interviewer: "Have you ever been on a team? What does it mean to contribute to a team?"

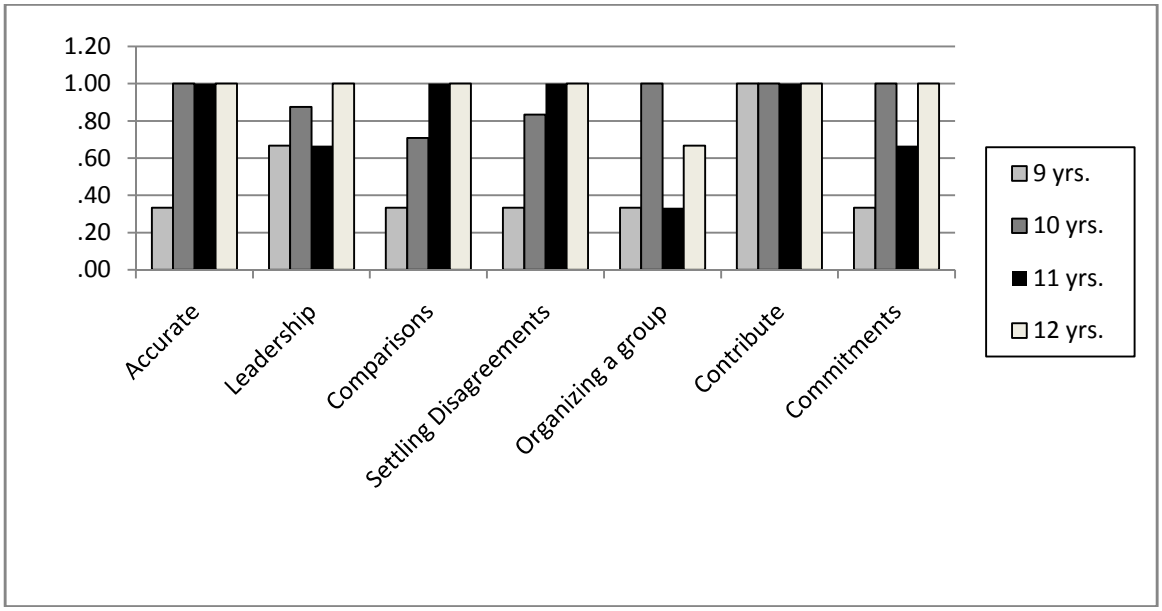
Participant 9: "Yes. Be a good teammate and take turns. Like if you're on basketball, pass the ball."

Although the participant involved in the presented interview may be representative of his/her peers we must maintain caution in suggesting that the responses are typical of the other nine year olds participating in our study. Further investigation involving more nine year olds would be necessary to make valid claims for inferring representation of our data.

Our analysis of the interview transcripts by age revealed the concepts "comparison" and "organizing a group" to be the most challenging for the participants to comprehend and articulate (see Figure 3). Our analysis also revealed the proportionally our age nine and ten participants were less able to describe or give an example of "comparison" than their eleven and twelve year old peers. Further analysis also revealed that in general the participants' had constrained abilities to communicate understanding of the concepts associated with organizing a group.

**Figure 1**

*The participants' level of understanding of major life skill concepts deliniated by age.*




**Group Understandings of Concepts.** As we continued our analysis of interview transcripts it became apparent the there were certain life skill concepts that all participants struggled to provide a clear understanding in their responses. With the exception of two concepts, 75% or more of the participants were able to articulate meaningful explanations of the targeted concepts. For the remaining two concepts only about half the participants could provide adequate communication of understanding. The first life skill concept that we identified as potentially overly complex was "comparing." This was made apparent as participants struggled to adequately share a time they had to "compare ways of doing something." Fifty-five percent of the participants that answered this question demonstrated a clear understanding. A similar approach was used as we attempted to determine participants' perceptions of the concept "organizing a group." as we asked, "Have you ever organized a group to reach a goal and how did you do that?" Again fifty-five percent of the participants answered this question with a response that could be interpreted as reflective of a clear understanding of the concept. The results for the analysis by life skill concept are presented in Table 4.

## Table 4

*Percentage of Participants Understandings of Concepts*

| Concepts | Clear Understanding | Approaching Understanding | No Understanding |
|---|---|---|---|
| Accurate | 91% | - | 9% |
| Leadership | 82% | 9% | 9% |
| Comparisons | 55% | 9% | 36% |
| Settling Disagreements | 73% | 9% | 18% |
| Organizing a Group | 55% | 18% | 27% |
| Contribute | 100% | - | - |
| Commitments | 82% | 9% | 9% |

## Discussion

Many challenges in assessing children life skill development occur due to their transition between stages of development from ages 9-12 (Boeree, 2006; Chambers & Johnston, 2001; Piaget, 2002;). In this research we attempted to address this issue, by developing a life skills assessment and then testing it empirically using a range of methods. Our results indicate the Life Skills Instrument that we developed for assessing 9-12 year old students is valid for assessing this populations' life skill development.

Our quantitative analysis of participants' responses to From A and Form B did not vary which indicates a number of items selected from the repository may be used to capture life skill development. Further, our analysis indicates that the items reliably and consistently measured life skill perceptions. Our independent samples t-test results indicate that one could potentially select from a range of indicators from the repository to create a valid measure of life skill outcomes for the 9-12 year old population. In addition, our results indicate that the altering or mixing of indicators does not compromise the validity and reliability of the life skill measures for this participant population.

However, our data also revealed elements of the instrument that may be potentially problematic. Only fifty-five percent of the interviewed participants were able to give a description or an example of the "organizing a group" and "comparing," concepts. We posit two possibilities for this result. The first possibility is that the participants, due to their present developmental stage, have difficulty in constructing an example of what it means to compare. According to Piaget's developmental theories, children from ages seven to around eleven tend to operate in the "concrete operations stage" (Boeree, 2006; Piaget, 2002). Children in this stage can compare items but may have difficulty being asked to reflect back to an example of when they had to compare something. Most of the ten and eleven year olds had more success in providing an example when prompted with a case related to school such as in comparing objects' weights or shapes. Since children around the age of twelve and older are more likely to be developmentally able to work within a "formal operational" (Boeree, 2006; Piaget, 2002) they are antitipated to have increased compacity to adequately explain abstract concepts, a condition that we exposed in our analysis. Our analysis of the interviews revealed all but one of the twelve year olds was able to describe and elaborate in detail an example of both comparing and organizing a group. The second reason may lie in the participants' lack of real-world

opportunity to practice the skills being measured (i.e. organizing a group or comparing). Regardless, our analysis did reveal the instrument was effective, but data should be considered within the context of the developmental stages of the participants completing the surveys.

## Implications

This life skills evaluation tool for participants ages 9-12 can be utilized to effectively measure life skill outcomes using the WSU Cooperative Evaluation System repository for the following life skills: communication, leadership, useful/marketable skills, self-responsibility, critical thinking, and positive identity. Participant responses to open-ended prompt and our interview data corroborate our conclusion that life skill development of children ages 9-12 can be successfully assessed. Further, since our data was drawn from participants engaging in a range of programs promoting life skill development there is indication that the items may transcend context and assess the constructs independent of the specific experience.

## Limitations

There were several limitations to our study. First, is the distribution of the participants by age that we interviewed, which included a scant number of nine year olds. This is reflective of the challenges associated with recruitment of this group. We had four consenting nine year olds to interview, but when we approached them some acted like they were intimidated by the interview process and declined. Therefore, our input from more nine year olds may result in different outcomes. The focus on this younger age group is certainly an excellent direction for future life skill assessment research.

Second, because of our desire to follow the format of extant instruments we constructed the age section of our demographic questionnaire to include only three age options (i.e. 8-10, 11-13, and 14-16). We recognized this as a problem with our age constrained population (9-12 year olds) after the second day of data collection and changed the section to allow participants to select their exact age. However, we were unable to delineate the ages of the participants completing the questionnaires and had to analyze the data in the two age range groups of 8-10 and 11-13. Therefore, we were unable to identify and analyze the data according to participants' distinct ages. Although we certainly had a large enough sample to limit the impact of this process, additional data collection by specific age level is certainly warranted in future investigations.

Third, many of the participants repeated the day camps and completed a questionnaire at each day camp. This may have been problematic as some of the repeating participants may not have wanted to take the survey again or might have completed the survey quickly without full attention to the item content. However, we feel that the interviews substantiated the expectation that the students could understand the content and were capable to accurately responding giving the time and encouragement to do so. Further evaluation of the implications of repeated completion of the surveys in conjunction with different camp settings is an excellent direction for future research.

## Conclusion

Youth development programming can provide a wide variety of opportunities for children ages 9-12 to develop life skills (Lerner & Lerner, 2008). Our research verified the ability to use a repository of life skill outcome indicators to measure the construct development in this population. It is our hope that others will capitalize on our methods to meet the ongoing goal of "providing an instrument with rigorous research integrity" (National 4-H Headquarters, 2001)

that can be used by program administrators to assess the impact of their offerings on youth life skill development.

## References


Bailey, S.J., & Deen, M.Y. (2002). Development of a Web-based Evaluation System: A tool for measuring life skills in youth and family programs. *Family Relations* , pp. 138-147.

Benson, P.J., Scales, P.C., Stephen, H.F., & Sesma, Jr., A. (2006, November). Positive Youth Development So Far: Core hypotheses and thier implications for policy and practice. *Insights & Evidence* , pp. 1-13.

Catalano, R.F., Berglund, L.M., Ryan, J.A., Lonczak, H.S., & Hawkins, J.D. (2004). Positive Youth Development in the United States: Research Findings on Evaluations of Positive Youth Development Programs. *The ANNALS of the American Academy of Political and Social Science* , pp. 591, 98-124.

Chambers, C.T., & Johnston, C. (2001). Developmental Differences in Children's Use of Rating scales. *Journal of Pediatric Psychology* , 27, 27-36.

Boeree, C.G. (2006). *Personallity Theories: Piaget*. Retrieved September 14, 2009, from Shippensburg University: http://webspace.ship.edu/cgboer/piaget.html

Damon, W. (2004). What Is Positive Youth Development? *The Annuals of the American Academy of Political and Social Science* , 591, 13-24.

Dewey, J. (1938). *Experience & Education.* New York: Touchstone.

Dryfoos, G.J. (1990). *Adolescents at Risk.* New York: Oxford University Press.

Green, J.C. (2001). Mixing Social Inguiry Methodologies. In V. Richardson(Ed.), *Handbook of Research on Teaching* (4th Ed., pp. 251-258). Washington, DC: American Educational Research Association.

Hendricks, P. (1996). *Develping Youth Curriculum Using the Targeting Life Skills Model: Incorporating developmentally appropriate learning opportunities to assess impact of life skill development.* Ames, Iowa: Iowa State University.

Gronlund, N.E. (1993). *How to Make Achievement Tests and Assessments.* MA: Allyn & Bacon Publishing.

*IES National Center for Education Statistics*. (n.d.). Retrieved August 13, 2009, from Digest of Education Statistics: http://nces.ed.gov/programs/digest/d08/tables/dt08_002.asp

Kolb, D. (1984). *Experiential Learning: Experience as the source of learning and development.* Englewood Cliffs, NJ: Prentice Hall, Inc.

Lerner, R.M., & Lerner, J.V. (2008). *The Postive Development of Youth.* Medford, Massachusetts: Tufts University.

Lerner, R. (2005). Promoting Positive Youth Development: Theoretical and empirical bases. *White paper prepared for the Workshop on the Science of Adolescent Health and Development, National Research Council/Institute of Medicine.* Washington, DC: National Academies of Science.

Loeser, D.H., Bailey, S.J., Benson, R.L., & Deen, M.Y. (2004, August). *Measuring Impacts with Young Audiences: Adapting a Life-Skills Instrument for Use with Third to Fifth Grade Youth.* Retrieved June 12, 2009, from Journal of Extension: http://www.joe.org/joe/2004august/rb1.php

McLellan, J., & Youniss, J. (2003). Two Systems of Youth Service: Determinants of voluntary and required youth community service. *Journal of Youth and Adolescence* , 32,47-58.

National 4-H Headquarters. (2001). *Prepared and Engaged Youth: National 4-H impact assessment project.* Washington, DC: National 4-H Headquarters.

Pfeiffer, J.W., & Jones, J.E. (n.d.). Retrieved December 3, 2008, from: http://www.experientiallearning.ucdavis.edu/module1/el1_40-5step-definitions.pdf

Piaget, J. (2002). *The Language and Thought of the Child* (Reprint of 3rd ed., c1959 ed.). New York: Routledge.

Pittman, K.J., & Cahill, M. (1992). *Pushing the Boundaries of Education: The implications of a youth development approach to education policies, structures and collaborations.* Washington, D.C.: Academy for Educational Development.

Rhodes, J., Grossman, J., & Resch, N. (2000). Agents of Change: Pathways through which mentoring relationships influence adolescents' academic adjustment. *Child Development* , 71, 1662-1671.

*Statistical Information: Youth Camp Outcomes Questionaire .* (2009, June). Retrieved June 24, 2009, from American Camp Association, Inc.: http://www.acacamps.org/members/outcomes/statistical_information.php

SPSS Inc. (1990). Chicago, Ill: SPSS Inc.

Tierney, P., Grossman, J.B., & Resch, N.L. (1995). *An Impact Study of Big Brothers/Big Sisters.* Philidelphia, PA: Public/Private Ventures.

*U.S. Department of Education: Policy.* (1980). Retrieved November 16, 2008, from ED.Gov: http://www.ed.gov/policy/elsec/leg/esea02/pg1.html

*US Department of Education.* (2009, January 16). Retrieved August 8, 2009, from ED.gov: http://www.ed.gov/admins/lead/account/saa.html#letters

Way, N., & Robinson, M. (2003). A Longitudinal Study of the Effects of Family, Friends, and School Experiences on the Psychological Adjustment of Ethnic Minority, Low-SES Adolescents. *Journal of Adolescent Research* , 324-346.

# Appendix A

## 4-H Day Camps Survey

We want to know how well the 4-H Summer Day Camps program works. We are asking you to answer the following questions about what you may have learned from being in the 4-H Day Camps. It should take about 10 minutes of your time to complete the survey. You do not have to fill out this survey. If you decide not to fill out the survey, it will not affect your participation in future UI Extension 4-H Youth Development programs. Your answers will be anonymous and will not be identified in any way. This means that no one will know how you have answered any of the questions. Answering the questions means you agree to participate in this survey. If you have any questions about this survey or the evaluation, please contact Brian Luckey or Kristina Luckey.

| ***Tell us about yourself.*** *(Check one response to each question).* | | | |
|---|---|---|---|
| ***1. My age is:*** | ***2. I am a:*** | ***3. My current home is a:*** | ***5. I would describe myself as:*** |
| ___ *8*<br>___ *9*<br>___*10*<br>___*11*<br>___ *12*<br>___ *13*<br>___*14*<br>___*15*<br>___*16* | ___*Girl*<br><br>___*Boy* | ___*farm*<br>___*rural non-farm*<br>___*town under 50,000*<br>___*city over 50,000*<br><br>***4. I Live in:***<br>_____ ***County*** | ___*African American*<br>___*American Indian*<br>___*Asian American*<br>___*Hispanic*<br>___*White/Caucasian*<br>___*Racially mixed* |

**1. The most important thing I have gained from attending the 4-H Day Camps is**

_____

_____

**2. The one thing, if anything, I would change about the 4-H Day Camps is**

_____

_____

**3. Other comments I would like to make are**

_____

_____

| ***Because of my participation in the 4-H Day Camp:*** | ***Back . . . before I participated in the 4-H Day Camps.*** | | | | ***Now . . . after I have participated in the 4-H Day Camps.*** | | | |
|---|---|---|---|---|---|---|---|---|
| | *Circle one number for each statement.* | | | | *Circle one number for each statement.* | | | |
| | ***No*** ☹ | ***Sometimes*** 😐 | ***Usually*** ☺ | ***Yes*** ✪ | ***No*** ☹ | ***Sometimes*** 😐 | ***Usually*** ☺ | ***Yes*** ✪ |
| 1. I know that I am good at doing one or more things. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 2. I follow instructions as they are given me. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 3. I can make a presentation. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 4. I accept responsibility for doing a job. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 5. I keep accurate and useful records. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 6. I listen carefully to what others say. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 7. I admit to mistakes I make. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 8. I use different leadership styles. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 9. I try doing the activities more than one way. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 10. I compare one way of doing things with another way. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 11. I can decide how to do a job after getting directions. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 12. I know that sometimes one thing is better than another. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 13. I feel like I have control over some things in my life. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 14. I can decide what I want to do. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |
| 15. I have control over my own personal goals/future. | ☹ | 😐 | ☺ | ✪ | ☹ | 😐 | ☺ | ✪ |

# Appendix B

Life Skills Evaluation Interview Protocol/Script:

*"Hi! My name is Mrs. Luckey. How are you? Did you have fun in your day camp? You just took a survey about today's day camp. I want to make the survey easy to take. I would like to ask you some questions about the survey you just took? Now there is no right or wrong answers I just want to know what you think. And, if at any time you would like to stop the interview, just let me know and we will stop. Ok?" Let's begin…*

[Used in conjunction with Survey Form A:]

1. *When you keep track of the projects you make a record book or on a recipe, what does it mean to be **accurate**?*

2. *Think of someone that is a great leader. It can be you, a friend, a President, anyone. What makes them a good leader? How do you know they are a great leader?*

3. *Are there other ways that can make someone a good leader?*

4. *Think of a time you had to **compare** ways of doing something. Will you please tell me about it?*

5. *Is there a time when one way was better than another? Will you please share with me an example?*

[Used in conjunction with Survey Form B:]

1. *When you disagree with someone or see others disagree with each other, how would you settle the disagreement?*

2. *A) Have you ever organized a group to reach a goal? How did you do that?*

   *B) Have you ever seen someone organize a group of people to reach a goal? What kinds of skills did they have to have to get everyone to work together to reach the goal?*
3. *A) Have you ever been on a team? What does it mean to **contribute** to a team?*

   *B) Do you know anyone that has been on a team (like a sports team)? What kinds of things does that person do to be a good teammate?*
4. *What are **commitments**? Can you give me an example of a commitment you have?*

5. *What does it mean to follow through on **commitments** you have made?*

"Now do you have any questions for me? Thank you for your time! It was fun to talk with you!"

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# Resource Review

# *Design It! Design Engineering in After School Programs* (2002), and *Explore It! Science Investigations in Out-of-School Programs* (2006)

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## Resource Review

# *Design It! Design Engineering in After School Programs* (2002), and *Explore It! Science Investigations in Out-of-School Programs* (2006)

Phillipa Myers
Rutgers Cooperative Extension of Essex County

**Abstract:** Science programming can be daunting for after school educators and para-educators. These two resources insure science is fun for both youth and educators! *Design It! Design Engineering in After School Programs* (2002), and *Explore It! Science Investigations in Out-of-School Programs* (2006) encourage the love of science learning through an exploratory format that is grounded in cooperative learning. Each of the two programs contain multiple projects using readily available and affordable materials. *Design It!* includes project topics such as Gliders, Spinning Toys, and Trebuchets. *Explore It!* includes project topics such as Wiring a House, Soda Science, and Balancing Toys.

## Introduction

Science programming can be daunting for after school educators and para-educators. These two resources insure science is fun for both youth and educators! *Design It! Design Engineering in After School Programs* (2002), and *Explore It! Science Investigations in Out-of-School Programs* (2006) encourage the love of science learning through an exploratory format that is grounded in cooperative learning. Each of the two programs contains multiple projects using readily available and affordable materials. In addition to afterschool programming, these resources are ideal for 4-H clubs and camps.

### Program Overview

These two series of engaging projects are grounded in cooperative learning and build on children's natural curiosity to explore. Children develop basic skills, learn general investigative strategies, and practice cooperative interaction. While the guided explorations are designed for ages 8 through 12, they are adaptable for a range of abilities so all can experience success. Structured to provide sustained engagement yet informal and exploratory, activities are designed for after school program environments and don't require extensive scientific knowledge from educators.

Each of the two programs consists of multiple projects, and each project includes several activities that build on knowledge and skills developed in the previous activity. Instructions clearly identify step-by-step actions and provide comprehensive background information. Most materials are affordable everyday items and easy to obtain.

Developed by the Education Development Center, Inc., Center for Science Education, *Design It! Design Engineering in After School Programs* (2002),has been reviewed and approved by National 4-H Council for use by 4-H programs, and *Explore It! Science Investigations in Out-of-School Programs* (2006) can also be implemented in 4-H programs and afterschool programs. Both received extensive review and field-testing by science centers, museums and after school programs across the country.

## Program Highlights

- Guided exploration encourages "outside-the-box" thinking
- All children have opportunity for success
- Clear directions and step-by-step strategies
- Understandable rationale and scientific background for each activity project
- Most materials are affordable everyday items and are easily found
- Connected to the National Science Education Standards

## Limitations

Cosmetic drawbacks include the uninviting and cumbersome presentation; paper binding results in awkward flipping between student pages, educator's guide, and background information. More detrimental is the absence of assessment and evaluation tools for any of the projects.

## Websites

- EDC's Center for Science Education - http://cse.edc.org/.
- *Design It!* Curriculum information - http://cse.edc.org/curriculum/designit/
- *Explore It!* Curriculum information http://cse.edc.org/products/ProductView.asp?PID=1778
- Kelvin – order curriculum and program materials - http://www.kelvin.com/

## References

Coltin, L., & Gannett, E. (2002). *Design it! Design Engineering in After School Programs*. National Institute on Out-of-School Time. Available online at http://cse.edc.org/curriculum/designit/

Zubrowski, B., & Hutchison, C. (2006). *Explore it! Science Investigations in Out-of-School Programs*. Education Development Center, Inc. Center for Science Education. Available online at http://cse.edc.org/products/ProductView.asp?PID=1778